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Epithelial RNase H2 Maintains Genome Integrity and Prevents Intestinal Tumorigenesis in Mice

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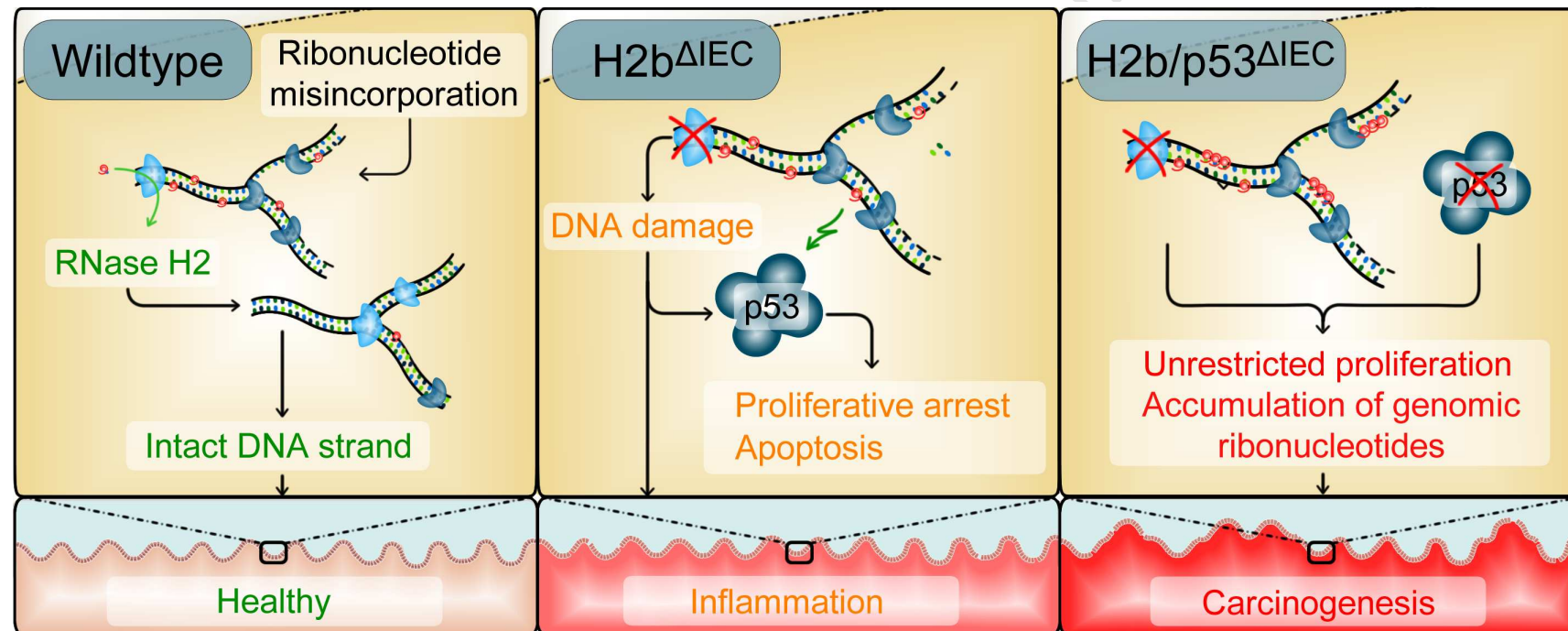
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Gastroenterology

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#### **Author Contributions**

K.A., B.R. and P.R. designed the study.

K.A., K.B., D.E., J.D., F.W., M.R., R.S.T., A.S., K.K., A.B., L.W., J.vE., F.T., S.L., N.K., L.L.,

C.B., R.L., W.vS., C.S., A.C. performed experiments and analyzed the data.

H.S., C.R., C.K., A.J., S.RS., S.S., T.K., B.R. and P.R. planned the project and supervised the experiment.

K.A., B.R. and P.R. wrote the manuscript.

**Abstract:**

**Background & Aims:** RNase H2 is a holoenzyme comprising 3 subunits (ribonuclease H2 subunits A, B, and C) that cleaves RNA:DNA hybrids and removes misincorporated ribonucleotides from genomic DNA via ribonucleotide excision repair. Ribonucleotide incorporation by eukaryotic DNA polymerases occurs during every round of genome duplication and produces the most frequent type of naturally occurring DNA lesion. We investigated whether intestinal epithelial proliferation requires RNase H2 function and whether RNase H2 activity is disrupted during intestinal carcinogenesis.

**Methods:** We generated mice with epithelial-specific deletion of ribonuclease H2 subunit B ( $H2b^{\Delta IEC}$ ) and mice that also had deletion of tumor suppressor protein p53 (p53) ( $H2b/p53^{\Delta IEC}$ ); we compared phenotypes with those of littermate  $H2b^{fl/fl}$  or  $H2b/p53^{fl/fl}$  (control) mice at young and old ages. Intestinal tissues were collected and analyzed by histology. We isolated epithelial cells, generated intestinal organoids, and performed RNA sequence analyses. Mutation signatures of spontaneous tumors from  $H2b/p53^{\Delta IEC}$  mice were characterized by exome sequencing. We collected colorectal tumor specimens from 467 patients, measured levels of ribonuclease H2 subunit B, and associated these with patient survival times and transcriptome data.

**Results:**  $H2b^{\Delta IEC}$  mice had DNA damage to intestinal epithelial cells and proliferative exhaustion of the intestinal stem cell compartment, compared with controls and  $H2b/p53^{\Delta IEC}$  mice. However,  $H2b/p53^{\Delta IEC}$  mice spontaneously developed small intestine and colon carcinomas. DNA from these tumors contained T>G base substitutions at GTG trinucleotides. Analyses of

transcriptomes of human colorectal tumors associated reduced levels of RNase H2 with shorter survival times.

**Conclusions:** In analyses of mice with disruption of the ribonuclease H2 subunit B gene and colorectal tumors from patients, we provide evidence that RNase H2 functions as a colorectal tumor suppressor. H2b/p53<sup>ΔIEC</sup> mice can be used to study the roles of RNase H2 in tissue-specific carcinogenesis.

**Key words:** RER, colon cancer, mouse model, DNA repair

## Introduction

Colorectal cancer (CRC) is the third most common type of cancer and the global burden of CRC is expected to increase by 60% to more than 2.2 million new cases and 1.1 million cancer deaths by 2030<sup>1</sup>. Approximately 90% of CRC cases develop sporadically without genetic predisposition<sup>2</sup>. A multi-hit genetic model of carcinogenesis has been first suggested in sporadic CRC as a paradigm for solid tumor progression and increased DNA damage along with impaired DNA repair have been recognized as essential cellular properties that accompany the acquisition of mutations. CRC originates from adult stem cells which maintain lifelong proliferation and are particularly prone to accumulate hazardous mutations<sup>3, 4</sup>. A direct correlation between the number of stem cell divisions and cancer risk over a range of tissues has been reported<sup>5</sup>.

Misincorporated single ribonucleotides represent the most common type of naturally occurring DNA damage (>1,000,000 per replicating mammalian genome)<sup>6, 7</sup>. Ribonucleotide excision repair (RER) is responsible for removing incorporated ribonucleotides from replicating DNA

with the RNase H2 complex providing the first key step of RER by cleaving 5' of the DNA-embedded ribonucleotide<sup>8</sup>. In addition, RNaseH2 was proposed to remove ribonucleotides of RNA:DNA hybrids, such as RNA oligonucleotides that prime Okazaki fragment during replication<sup>9</sup> or R loops present during transcription<sup>10</sup>, both of which may independently contribute to genome damage<sup>11, 12</sup>. Despite the high frequency of such lesions it is completely unknown if dysfunctional RNase H2 translates into increased mutagenesis and – as a consequence – into carcinogenesis or tumor progression. Loss of RNase H2 in mice is embryonically lethal and characterized by an accumulation of genomic ribonucleotides associated with extensive DNA damage and genome instability<sup>7, 13</sup>.

A presumable implication for RNase H2 in carcinogenesis is based on the observation that community databases of mutational landscapes in human cancer (ICGC, COSMIC) list numerous somatic RNase H2 mutations in a variety of cancers<sup>14</sup>. In addition, variants in the RNaseH2 gene have been recently described in glioblastoma and prostate carcinoma<sup>15</sup>. Hence, although clinical data infer a potential role of RNaseH2 in cancer development, experimental evidence on the functionality of these RNase H2 cancer variants is lacking.

We report here that intestinal ablation of RNase H2 results in chronic DNA damage, which, in the context of deleted p53, results into spontaneous manifestation of intestinal carcinomas. We thereby put forward a novel link between RNase H2 protein function and intestinal epithelial carcinogenesis.

## Materials and Methods

### Mice

Floxed RNase H2b mice were described in (Hiller et al, J Exp Med, 2012), while p53<sup>fl/fl</sup> mice were obtained from Jackson Laboratory, ME, USA (#8562). Villin(V)-*cre*<sup>+</sup>; H2b<sup>fl/fl</sup> (H2b<sup>ΔIEC</sup>) and p53/RNase H2b<sup>fl/fl</sup> (p53/H2b<sup>ΔIEC</sup>), ERT-Cre<sup>+</sup> (Jackson Laboratory, #4682); RNase H2b<sup>fl/fl</sup> (RNase H2<sup>ΔTam</sup>) mice, backcrossed for at least 6 generations, were used at an age of 8-12-weeks for all experiments. All mice were provided with food and water *ad libitum* and maintained in a 12-h light-dark cycle under standard conditions at Kiel University. Tail or ear biopsy genomic DNA was used for genotyping of respective mouse strains. Procedures involving animal care were conducted in agreement with national and international laws and policies with appropriate permission. All experiments were carried out in accordance with the guidelines for animal care of the Christian-Albrechts-University of Kiel.

### **Histopathological analyses of murine small intestinal tissue**

Postmortem, the entire small intestine was excised and separated longitudinally into two equal parts. 10 cm of the most distal small intestine was rolled up, starting with the distal part thereby having the distal ileum at the very inner layer and the proximal intestine at the very outer layer. The entire specimen was fixed in 10% formalin. Paraffin sections were cut and stained with hematoxylin/eosin. Histological scoring was performed in a blinded fashion by two independent observers. The histological score displays the combined score of inflammatory cell infiltration and tissue damage as described elsewhere<sup>16</sup>.

### **Histological grading of intestinal tumors**

According to the WHO Classification of Tumors of the Digestive System (4th edition; Fred T Bosman et al., IARC Lyon 2010), adenocarcinomas of the small intestine were graded as “low

grade” ( $\geq 50\%$  gland formation) or “high grade” ( $< 50\%$  gland formation). Dysplasia of the small intestine was graded as “low grade” or “high grade”, depending on the degree of architectural complexity, extent of nuclear stratification and severity of abnormal nuclear morphology.

### Exome sequencing

DNA was isolated from liver, small intestinal tumor and adjacent non tumor tissue of the same mice (n=4 mice/genotype H2b/p53<sup>fl/fl</sup>, H2b/p53 <sup>$\Delta$ IEC</sup>). DNA exomes libraries were prepared using the “SureSelectXT Mouse All Exon” Kit (Agilent, CA, United States) and libraries were sequenced on an Illumina HiSeq3000. After adapter trimming and excluding bad quality sequences and bases, all reads were mapped against the mouse genome reference mm10 using BWA v.0.7.15<sup>17</sup> for the whole exome sequencing (WES) data and TopHat v.2.0.8b<sup>18</sup> for the transcriptome sequences. Duplicates were marked with the Picard tool MarkDuplicates.jar v1.139 in the WES analyses.

SNVs and small InDels were called with GATK v.3.5.0<sup>19</sup> and classified using Annovar (version 2016-02-01)<sup>20</sup> based on the Ensemble annotation (v. 2014) offered by UCSC. Variants, which were not annotated in the database dbSNP build 142<sup>21</sup>, were classified as novel. Allele-counts were determined for each position using samtools mpileup (v. 1.4)<sup>22</sup>. All called SNVs, which were covered by five or more reads and supported by less than 5% of the reads in the corresponding liver sample, were defined as somatic. The investigation of the SNV patterns was performed using the R package MutationPatterns (v 1.0.0)<sup>23</sup> as well as custom scripts. To determine differentially expressed genes, read counts per transcript were counted with the Python script HTSeq version 0.6.1p1<sup>24</sup> using the Gencode vM6 annotation and the mode ‘union’. Reads with a TopHat2 alignment quality lower 20 were skipped. P-values for



differentially expressed genes were calculated with DeSeq2 version 1.14.1<sup>25</sup> after outlier replacement based on trimmed mean value. The online tool InnateDB<sup>26</sup> was applied to test for enriched pathways. Thereby, the correction for multiple testing was performed with the R function 'p.adjust' using the method developed by Benjamini and Hochberg. Networks were created with Cytoscape, whereby connections between genes were based on entries annotated in the String database with medium stringency (interaction score > 400)<sup>27</sup>. Integrated networks were produced using the R-package igraph based on the String database with medium stringency<sup>28</sup>.

### **Candidate validation in human CRC samples**

Paired samples of normal and tumour tissue (n=155) were obtained during endoscopy using standard biopsy forceps in addition to diagnostic specimens for histopathological analysis in the interdisciplinary endoscopy unit of the University Hospital Kiel, Germany. Samples were immediately snap frozen in liquid nitrogen ensuring ex-vivo times of less than 30 seconds. The study protocol was approved by the institutional review board of the Medical faculty of the Christian-Albrechts-University in Kiel prior to the commencement of the study ("Ethikkommission der Medizinischen Fakultät der Christian-Albrechts-Universität zu Kiel; Az: A 110/99).

### **Online database survival analysis**

Large cohort survival analysis was performed by using a public database with transcriptome analysis data. RNA sequencing data of 467 patients with colorectal adenocarcinoma (COADREAD) was obtained from The Cancer Genome Atlas (TCGA) database and analyzed

using the SurvExpress web resource (<http://bioinformatica.mty.itesm.mx/SurvExpress>)<sup>29</sup>. For survival analysis, the samples of each cancer types were divided into two groups according to high and low expression levels to maximize risk groups according to the built-in setup of the website. The group with high RNA expression was compared to the cohort with low RNA expression. A log rank test was used to assess association with survival.

## Results

### Ablation of intestinal RNase H2 in mice causes age-dependent defects in the crypt epithelial stem cell niche

To investigate the impact of RNase H2 on the intestinal epithelium, we intercrossed floxed *Rnaseh2b* mice with Villin-Cre mice (termed H2b<sup>ΔIEC</sup> hereafter) and confirmed absence of the RNase H2 complex in H2b<sup>ΔIEC</sup> mice by immunohistochemistry and Western blotting (**Supplementary Figure 1 A-C**). Of note, while the RNase H2 holoenzyme consists of the three subunits A (catalytic), B and C, genetic deletion of the B subunit is sufficient to disintegrate the whole enzyme complex<sup>7</sup>. Histopathological analysis of 8-week old mice showed distorted crypt architecture with modest epithelial damage (erosion and crypt hyperplasia) in the small intestinal mucosa (**Figure 1 A,B**) of H2b<sup>ΔIEC</sup> mice, which was accompanied by higher numbers of mucosal IBA1<sup>+</sup> macrophages (**Figure 1 C,D**) and a trend towards increased CD3<sup>+</sup> T-cells (**Figure 1 E,F**). Further phenotyping revealed normal cellular differentiation (**Supplementary Figure 1 D-G**) and proliferation, as shown by BrdU incorporation (**Figure 1 G,H**) and Ki67 (**Figure 1 I,J**) staining. Loss of intestinal RNase H2 led to increased epithelial apoptosis (**Figure 1 K,L**), presumably as a consequence of the increased DNA damage (**Figure 1 M,N**). Despite histological evidence of intestinal inflammation, H2b<sup>ΔIEC</sup> mice did not present with an overt macro-morphological phenotype (**Supplementary Figure 1 H-J**), indicating that constitutive intestinal epithelial DNA damage at young age does not translate into a gross local or even systemic inflammatory response.

To test the consequences of long-term intestinal DNA damage we assessed the phenotype in 52-week old animals. At this timepoint, H2b<sup>ΔIEC</sup> mice showed a modest increase in crypt depth and unaltered villus length (data not shown). However, we observed a proliferation deficit (by Ki67

and BrdU staining), specifically in the basal crypt region of the entire jejunum (data not shown) and ileum, indicative of an intestinal stem cell (ISC)- specific impact of RNase H2B loss (**Figure 2 A-D**). Proliferation in the transit amplifying (TA) zone seemed to be retained, whereas apoptosis was increased in H2b<sup>ΔIEC</sup> mice (**Figure 2 E,F**).

Aged mice (52 weeks) displayed increased DNA damage (**Figure 2 G,H**), which was associated with irregular differentiation into lysozyme-positive Paneth cells (**Figure 2 I,J**) and goblet cells (**Figure 2 K,L**). Paneth cell displayed a distorted ultrastructure (**Figure 2 M**) and decreased epithelial mRNA levels of lysozyme and of cryptidin1 (data not shown). H2b<sup>ΔIEC</sup> mice presented with substantial histological inflammation in the small intestine (**Figure 2 N,O**) and reduced length of the small intestine, but no other significant macromorphological changes (**Supplementary Figure 1 K-M**). Moreover, we did not observe age-dependent differences with regard to genomic ribonucleotide incorporation in aged and young H2b<sup>ΔIEC</sup> mice (**Supplementary Figure 1 N**). Importantly, increased mucosal inflammation and impaired epithelial proliferation was phenocopied in the histology of the colon of aged mice (**Supplementary Figure 2 A-N**). In conclusion, absence of intestinal RNase H2 results in epithelial DNA damage and impairment of epithelial proliferation and cell death, which manifests into spontaneous age-dependent intestinal inflammation.

### **Ablation of intestinal RNase H2 in mice confers susceptibility to experimental colitis**

We next addressed the functional consequences of RNase H2 deletion during forced regenerative responses of the colonic mucosa using an acute dextran sodium sulfate (DSS) model. H2b<sup>ΔIEC</sup> mice developed a fulminant colitis with increased weight loss (**Figure 3 A**), which was accompanied with reduction in spleen weight (**Figure 3 B**) and colon length (**Figure 3 C**).

Histological assessment revealed epithelial DNA damage (**Figure 3 D,E**) and overall increased histopathological inflammation (**Figure 3 F,G**). Excessive inflammation was associated with strongly reduced epithelial proliferation (**Figure 3 H,I**) and increased epithelial cell death in H2b<sup>ΔIEC</sup> mice (**Figure 3 J,K**). Also, in a chronic DSS colitis model (repetitive exposure of low dose DSS over three cycles), H2b<sup>ΔIEC</sup> mice displayed increased weight loss and histological inflammation, along with decreased epithelial proliferation and increased epithelial apoptosis (**Supplementary Figure 3 A-H**). Notably, we did not observe any spontaneous tumor development (small intestine, colon) after chronic DSS exposure in H2b<sup>ΔIEC</sup> mice.

### **Impaired epithelial regeneration in aged H2b<sup>ΔIEC</sup> mice depends on functional p53**

To understand the underlying molecular principle of intestinal growth arrest in H2b<sup>ΔIEC</sup> mice, we subjected purified small intestinal epithelial cells from aged mice (n=4 mice; 2f, 2m/genotype) to RNA sequencing. Hierarchical clustering of top 100 regulated genes (up/down) displayed numerous p53-related genes to be upregulated in the transcriptome of H2b<sup>ΔIEC</sup> epithelial cells (**Supplementary Figure 4 A**) (**Supplementary Table 1-2**). KEGG (Kyoto encyclopedia of genes and genomes) pathway enrichment analysis of top 250 regulated genes displayed that “p53” was among the top regulated terms in H2b<sup>ΔIEC</sup> epithelial cells (**Supplementary Figure 4 B**). Increased p53 protein stabilization was further confirmed using Western blot with protein lysates from isolated H2b<sup>ΔIEC</sup> intestinal epithelial cells (IECs) and immunohistochemistry in the small intestine (**Supplementary Figure 4 C-E**). To confirm a link between *Rnaseh2b* deletion and p53 activation, we generated intestinal organoids from mice carrying a Tamoxifen-inducible knockout of RNase H2b (H2b<sup>ΔTam</sup>). Upon tamoxifen treatment H2b<sup>ΔTam</sup> intestinal organoids rapidly developed epithelial cell death and activation of the p53 signaling pathway

(**Supplementary Figure 5**). The molecular nexus between RNase H2 deficiency and p53 activation was further confirmed in MEFs from H2b<sup>ΔTam</sup> mice<sup>30</sup>. Tamoxifen-induced *Rnaseh2b* ablation in MEFs led to upregulation of p21, a canonical downstream target of p53 and induction of cellular senescence. However, we did not observe detectable activation of caspase-3, indicating a difference of the biological impact of RNase H2 deficiency between MEFs and IECs (**Supplementary Figure 6**).

To further corroborate the hypothesis that p53 activation is responsible for the proliferation deficit in the absence of RNase H2, we generated mice lacking both intestinal *Rnaseh2b* and *p53* (H2b/p53<sup>ΔIEC</sup>). By assessing the growth capacity in small intestinal organoids from 8 week-old mice, we observed that H2b<sup>ΔIEC</sup> organoids displayed a severe growth impairment, which was restored upon simultaneous p53 deletion (**Figure 4 A,B**). This effect was phenocopied in colon organoids from 52-week old mice suggesting the presence of the molecular effect throughout the intestinal epithelial lining (**Supplementary Figure 7**).

Further RNA sequencing of small intestinal organoids from H2b<sup>fl/fl</sup>, H2b<sup>ΔIEC</sup> and double-deficient H2b/p53<sup>ΔIEC</sup> intestinal organoids confirmed the upregulation of p53-dependent genes in H2b<sup>ΔIEC</sup>, which was abolished in H2b/p53<sup>ΔIEC</sup> intestinal organoids (**Figure 4 C-D, Supplementary Table 3,4**). Notably, KEGG gene set enrichment analysis comparing H2b<sup>ΔIEC</sup> with H2b/p53<sup>ΔIEC</sup> transcriptomes revealed that upregulated pathways were enriched for alternative DNA damage repair pathways (*nucleotide excision repair, base excision repair*) in H2b/p53<sup>ΔIEC</sup> organoids, indicating the induction of compensatory DNA repair mechanism in the absence of functional RNase H2 (**Figure 4 D**). Interaction-analysis using STRING database<sup>31</sup> of top 50 downregulated genes in H2b/p53<sup>ΔIEC</sup> revealed a densely connected network of p53-dependent genes (**Figure 4 E**). Thus, we conclude that restoration of epithelial proliferation in H2b/p53<sup>ΔIEC</sup> organoids is

essentially orchestrated by p53. This finding was confirmed *in-vivo*, as isolated intestinal crypts of 20 weeks old H2b/p53<sup>ΔIEC</sup> mice specifically displayed the absence of p53-dependent gene induction (*Ccng1*, *Bax*, *Mdm2*, *Cdkn1*) (**Figure 4 F**). Most importantly, we observed re-appearance of *Olfm4*<sup>+</sup> stem cells, excessively (compared to H2b/p53<sup>fl/fl</sup> animals) restored epithelial proliferation (**Figure 4 G-J**) along with similar levels of DNA damage and reduced epithelial apoptosis in H2b/p53<sup>ΔIEC</sup> mice (**Supplementary Figure 8 A-D**).

### Spontaneous tumor development in H2b/p53<sup>ΔIEC</sup> mice

Starting at the age of 30 weeks, H2b/p53<sup>ΔIEC</sup> mice either died or had to be withdrawn from the study due to deteriorating physical condition (**Figure 5 A**). Post-mortem analysis revealed development of small intestinal (n=17/17) and colon (n=2/17) tumors (**Figure 5 B-D**). Interestingly, male mice, compared to females, showed slightly reduced overall survival despite comparable tumor burden (data not shown). Histopathological examination graded tumors as either adenomas with high grade dysplasia (33%) or low grade epithelial carcinomas (66%) (**Figure 5 E,F, Supplementary Figure 9 A**). Importantly, p53<sup>ΔIEC</sup> mice do not display spontaneous intestinal tumor formation up to 14 months<sup>32</sup>, even under persistent DNA damage<sup>33</sup>. RNA sequencing of tumors and adjacent non-tumoral tissue from H2b/p53<sup>ΔIEC</sup> mice revealed differential expression of 1,640 genes (625 up, 1,015 down) (**Figure 5 G, Supplementary Table 5,6**). Upregulated transcripts were enriched for *Wnt signalling pathway* (*Wnt7b*, *Wnt10a*, *Wif1*) and pathways associated with epithelial-to-mesenchymal transition (*Mmp-3,-7,-13,-14*) (**Figure 5 H and Supplementary Figure 9 B,C**). In line with this, we found nuclear accumulation of TCF-4, SOX-9 (**Supplementary Figure 9 D,E**) and upregulation of canonical Wnt target genes (*Cd44*, *Axin2*, *Sox9*) in tumor vs. adjacent non-tumor tissue (**Figure 5 I**), although we did not



observe increased nuclear accumulation of active  $\beta$ -catenin (data not shown). Altogether our data show that concomitant deletion of RNaseH2 and p53 drives spontaneous intestinal tumorigenesis in H2b/p53 <sup>$\Delta$ IEC</sup> mice.

### **H2b/p53 <sup>$\Delta$ IEC</sup> mice display a distinct mutational signature**

We next investigated the genomic events related to this malignant transformation and assessed the ribonucleotide content of tumor-derived DNA by gauging its alkaline sensitivity<sup>34</sup>.

We observed a strong increase in genomic ribonucleotides in tumor DNA and also to a lesser extent in non-tumor H2b/p53 <sup>$\Delta$ IEC</sup> and H2b <sup>$\Delta$ IEC</sup>, but not in H2b/p53<sup>fl/fl</sup> intestinal DNA. (**Figure 6 A,B, Supplemental Figure 10 A,B**). In contrast to H2b <sup>$\Delta$ IEC</sup> mice (see **Supplementary Figure 1 K**), we observed a gradual age-dependent increase of genomic ribonucleotide incorporation in intestines from H2b/p53 <sup>$\Delta$ IEC</sup> mice (**Supplemental Figure 10 C**). To investigate whether genomic ribonucleotides resulting from defective RNase H2 are mutagenic, we exome-sequenced tumors of individual mice (n=4 mice; 2 females & 2 males/genotype) and compared them to i) adjacent non-tumor H2b/p53 <sup>$\Delta$ IEC</sup> epithelium and ii) RNase H2-proficient liver DNA from the same animal. We first used an established approach to describe the observed somatic variants in their 5' and 3' base context thus resulting in 96 possible mutation types<sup>35</sup>. Tumor and non-tumor tissue shared a remarkable degree of similarity and individual samples shared a high degree of conformity of enriched mutation types with a striking overrepresentation of T>G transversions in the context of a 5' and 3' G. (**Figure 6 C, Supplemental Figure 11**), which were observed in all 8 samples from H2b/p53 <sup>$\Delta$ IEC</sup> mice, both in tumor and non-tumor tissue. Importantly, the definition of mutation types has been employed on a catalogue of somatic mutations (COSMIC database)<sup>36</sup> from over 7,000 human tumor genomes to infer specific mutational signatures (i.e.

combinations of mutation types) describing the heterogeneity of mutational processes operative during tumorigenesis<sup>37</sup>. We tested to which extent mutational patterns in our mouse samples shared similarity with these previously established mutational signatures in humans. We found that mutational signature 3 (according to the COSMIC nomenclature) contributed up to 75% to the observed patterns of mutation types in H2b/p53<sup>ΔIEC</sup> mice (**Figure 6 D**). This signature has been associated with failure of DNA double strand break repair by homologous recombination<sup>35</sup>. Despite displaying highly similar mutational signatures, tumor and corresponding non-tumor samples clustered separately in terms of gene expression and observed mutations, which included Insertions/Deletions (InDels) and single nucleotide variants (SNVs) (**Supplementary Figure 12 A-C**). To identify a potential mutation hotspot involved in tumorigenesis in H2b/p53<sup>ΔIEC</sup> mice, we compiled a list of tumor-specific mutations (SNVs and small InDels), containing only genetic alterations that were not present in the corresponding non-tumor H2b/p53<sup>ΔIEC</sup> epithelium of the same mouse (**Supplementary Tables 7,8**). With the exception of a hotspot of small InDel's of all tumors within the *Nlrp1a* gene, which has been previously shown to be causally linked to skin cancer in humans<sup>38, 39</sup>, we were not able to detect recurrent mutations, which would indicate a specific mechanism downstream of RNase H2 deficiency. In protein interaction network reconstruction (using dysregulated and mutated genes as input), genes affected by somatic SNVs or small InDels showed only very few connections among each other, but were individually linked to a central network of dysregulated genes (**Supplementary Figure 12 D-F**). Interestingly and in contrast to RNase H2 null yeast<sup>6</sup>, no global increase in small deletions in both RNase H2-deficient experimental groups was found (**Supplementary Figure 13**).

### **RNase H2 acts as a tumor suppressor in human colorectal carcinogenesis**

To explore whether impaired RNase H2 function is linked to colorectal carcinogenesis in humans, we examined the impact of five of the most common somatic mutations found in one of the three RNase H2 subunits in human cancers, deposited in the COSMIC cancer database on RNaseH2 function. Notably, 3 out of 5 mutations were found in adenocarcinoma of the large intestine (**Supplementary Table 9**). Although the strength of the effect was variable, all five mutations showed a significant decrease in nuclease activity towards DNA duplexes containing single ribonucleotides and RNA:DNA hybrids and had a reduced thermostability, indicating that the cancer-associated RNase H2 variants are indeed hypomorphs (**Figure 7 A-C**).

Next, we monitored RNase H2 expression in a cohort of colorectal cancer patients (n=155) and compared *RNASEH2A* transcript levels in paired tumor and adjacent normal tissue. Clinical data were retrieved from n=122 patients and no significant correlation between *RNASEH2A* expression and disease subtype was observed (**Supplementary Table S10**). Expression of *RNASEH2A* was significantly increased in tumor samples opposed to adjacent normal colon tissue (**Figure 7 D**). We independently validated tumor-specific overexpression of *RNASEH2A* in non-paired samples of the colorectal adenocarcinoma cohort (COADREAD, n=467) of The Cancer Genome Atlas (TCGA) consortium<sup>40</sup> (**Supplementary Figure 14**). Finally, we used the publically accessible databases to address whether *RNASEH2A* expression affects the outcome of colorectal cancer. For this purpose, we analyzed RNA sequencing and clinical survival data from COADREAD cohort using the SurvExpress web resource (<http://bioinformatica.mty.itesm.mx/SurvExpress>)<sup>29</sup>. Interestingly, low *RNASEH2A* tumor expression significantly correlated with poor overall survival compared to patients with high *RNASEH2A* tumor expression (**Figure 7 E**).

## Discussion

In this study, we investigated the role of RNase H2 on intestinal epithelial genome integrity and tumor formation by generating an intestinal epithelial specific knock-out mouse. Young H2b<sup>ΔIEC</sup> mice displayed epithelial DNA damage and increased apoptosis, which manifested over time (1 year) into substantial inflammation and structural damage of the intestinal epithelium. Importantly, epithelial proliferation in aged H2b<sup>ΔIEC</sup> mice was specifically impaired at the base of the crypts with virtually no cycling intestinal stem cells (ISCs), whereas proliferation (and accompanying apoptosis) in aged H2b<sup>ΔIEC</sup> mice was largely restricted to the TA cell region. This might indicate that fast cycling TA cells react to chronic DNA damage predominantly by cell death, whereas intestinal stem cells appear to favour proliferative arrest as response to persistent DNA damage.

Using RNA sequencing we identified p53 as a key suppressor of epithelial proliferation upon RNase H2 loss in IECs. Vice versa proliferation in H2b/p53<sup>ΔIEC</sup> mice was excessively restored and associated with persistent DNA damage, which thereby likely resulted in the accumulation of hazardous mutations and intestinal tumor development. Interestingly, the observation that H2b/p53<sup>ΔIEC</sup> mice predominantly develop small intestinal and only few colonic tumors is similar to Apc/Min+ mice, a classical murine model of human CRC. This model, although being largely reminiscent of human CRC with regard to β-catenin deregulation, also develops high numbers of small intestinal tumors compared to fewer colonic tumors<sup>41</sup>. On the other hand, APC mutations are rarely associated with small intestinal tumors in humans, which indicates a potential species-specific difference between mice and humans in the propensity of their small intestinal epithelium to give rise to tumors.

H2b/p53<sup>ΔIEC</sup> tumors and, to a lesser extent, H2b/p53<sup>ΔIEC</sup> non-tumor intestines contained high numbers of genomic ribonucleotides. Of note, incorporated ribonucleotides themselves cannot be regarded as a heritable mutation, as they will not be copied to the nascent strand in the following rounds of DNA replication. It is therefore likely that other mechanisms (e.g. the degree of epithelial proliferation, age-dependent decline of compensating repair mechanisms<sup>42</sup>) might affect the amount of potentially hazardous genome-embedded ribonucleotides in H2b/p53<sup>ΔIEC</sup> mice. Altogether, our findings suggests that genomic ribonucleotides are the products of dysfunctional RNase H2 that constitute the mutagenic DNA lesions and consequently drive tumorigenesis in this model.

To decipher the mutational consequences of genomic ribonucleotides we used exome sequencing to establish a mutational signature specific for defective RNase H2 function. Mutational patterns from RNase H2-negative tissues (tumor, non-tumor) invariantly contained distinct T>G transversions at GTG trinucleotides. T>G transversion have been described in the mutational signature 3 (according to the COSMIC nomenclature), which has previously been linked to a failure of DNA double-strand break-repair via homologous recombination (HR).

The high prevalence of signature 3 in H2b/p53<sup>ΔIEC</sup> tumors (and H2b/p53<sup>ΔIEC</sup> non-tumor tissue for that matter) could indicate that alternative DNA repair mechanism (e.g. NHEJ) may occur at increased frequency alongside HR to allow RNase H2 deficient cells to cope with the high level of DNA damage. This would be consistent with the increased homologous recombination and synthetic lethality with HR deficiency observed in RNase H2 null human cells<sup>43</sup>. Interestingly and in contrast to previous reports on the function of RNase H2 in yeast<sup>6</sup>, our exome sequencing data did not reveal increased InDel frequency in H2b/p53<sup>ΔIEC</sup> tissue. As specific 2-5bp deletions observed in yeast resulted from positive selection in the experimental setting, it might be

considered unlikely to discover this specific mutation type in the described in-vivo setting of H2b/p53<sup>ΔIEC</sup> mice at a high frequency.

To assess the impact of RNase H2 on human tumorigenesis we recombinantly expressed five recurrent somatic tumor variants of human RNase H2 and found that enzymatic activity and complex stability were reduced in all tested RNase H2 tumor variants, albeit to a varying degree. Although our data intriguingly point to a specific role of RNase H2 for malignant transformation of the intestinal epithelium it must be noted that the degree of activity impairment varied across cancer mutations and even a significant decrease of enzymatic activity may not be equivalent to the total knockout of RNase H2 as described in our murine model. Therefore, further molecular delineation of the impact of loss-of-function mutations in RNase H2 on maintenance of genome integrity is needed. Moreover we cannot differentiate in our murine model whether accumulating mutations and DNA damage in RNase H2-deficient intestinal epithelial cells result from impaired RER or from a failure to resolve RNA:DNA hybrids (e.g. R-loops) as both processes are known to influence genome integrity. Given the sheer number of misincorporated ribonucleotides per replication round, the fact that RNase H2 mutations lead to PARP trapping due to impaired RER<sup>43</sup> and that impaired RER has been linked to skin cancer<sup>44</sup>, it is tempting to speculate that defective RER plays a dominant role in our model.

In apparent contrast with this, we established that *RNASEH2A* expression was increased in CRC. This finding indicates that increased RNase H2 expression displays a physiological adaption of cells with high proliferative turnover. This interpretation is substantiated by our finding that RNase H2B deficiency leads to a dramatic decrease of cellular proliferation and by the finding that rapidly proliferating tissues display significantly increased *RNASEH2A* expression levels<sup>7</sup>. Increased *RNASEH2A* mRNA expression in tumor specimen from CRC patients could therefore

represent a futile attempt of the cells to maintain genomic integrity despite uncontrolled proliferation. It must be noted that we did not observe any significant association of tumor *RNASEH2A* expression with several clinical features of CRC (e.g. MSI vs. MSS or histological subtype) and a more thorough correlation analysis is clearly warranted in larger prospective studies. When stratifying according to *RNASEH2A* expression status in a survival analysis, patients with lower tumor *RNASEH2A* expression levels had a significantly lower survival time, which is in line with previous findings from *RNASEH2A* expression in cervical cancer<sup>45</sup>.

Hence, although the exact impact of altered RNase H2 activity (e.g. by loss-of-function mutations) during tumorigenesis of human CRC remains elusive, this seeming paradox could be well explained by the findings in our murine model. Our mouse model therefore provides an excellent tool to decipher the potential roles of RNase H2 function (RER, R-loop resolution) and its therapeutic exploitation (increased PARP trapping in RNase H2 deficient tumor cells<sup>43</sup>) in intestinal carcinogenesis.

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## Figure legends

### Figure 1 Increased DNA damage and apoptosis in young H2b<sup>ΔIEC</sup> mice

Representative pictures (A) and histological analysis of H&E sections (B) from small intestinal section (n=5 for both genotypes). Representative pictures and statistical assessment of the

abundance of IBA1<sup>+</sup> (C,D) and CD3<sup>+</sup> cells (E,F) in the lamina propria of H2b<sup>fl/fl</sup> or H2b<sup>ΔIEC</sup> mice.

Anti-BrdU (G,H) and anti-Ki67 (I,J) staining in small intestinal sections. TUNEL<sup>+</sup> (K,L) and anti-γH2AX<sup>+</sup> (M,N) staining in small intestinal sections. For D,F a minimum of 5 HPF/intestine were assessed in 8-12 week old H2b<sup>ΔIEC</sup> (n=5; 3m, 2f) and H2b<sup>fl/fl</sup> control mice (n=6; 4m, 2f). For H-N, a minimum of 100 crypts/intestine were assessed for H2b<sup>ΔIEC</sup> (n=5; 3m, 2f) and H2b<sup>fl/fl</sup> control mice (n=6; 4m, 2f). Data are expressed as mean +/- s.e.m and significance was determined using non-parametric Mann Whitney U Test. \*, p<0.05; \*\*\*, p<0.001.

### **Figure 2 Impaired epithelial regeneration in aged H2b<sup>ΔIEC</sup> mice.**

Anti- BrdU incorporation (A,B) and anti-Ki67 staining (C,D) in small intestinal sections. Note the lack of cellular proliferation in the intestinal stem cell niche located at the crypt base, as indicated by the black arrow. TUNEL (E,F) and anti-γH2AX (G,H) staining in small intestinal sections. Lysozyme (I,J) and PAS (K,L) staining in small intestinal sections. Distorted Paneth cell ultrastructure in H2b<sup>ΔIEC</sup> mice (bottom pictures represent magnifications of the images above)(M). Histological analysis of H&E (N,O) in small intestinal sections (n=5/genotype). For B,D,F,H,J,L, a minimum of 100 crypts/intestine and for N whole small intestinal swiss rolls were assessed in 52 week old H2b<sup>ΔIEC</sup> (n=10; 6m, 4f) and H2b<sup>fl/fl</sup> control mice (n=6; 3m, 3f). Data are expressed as the mean +/- s.e.m and significance was determined using non-parametric Mann Whitney U Test. \*, p<0.05; \*\*, p<0.01; \*\*\*, p<0.001. \*, p<0.05; \*\*, p<0.01; \*\*\*, p<0.001.

### **Figure 3 Increased susceptibility to DSS induced colitis in H2b<sup>ΔIEC</sup> mice**

Weight loss curve of 8-12 week old  $H2b^{fl/fl}$  (n=12; 9m, 3f) and  $H2b^{\Delta IEC}$  (n=10; 5m, 5f) mice (A). Postmortal spleen weight (n=12/10) (B) and colon length (n=12/10) (C) of  $H2b^{fl/fl}$  and  $H2b^{\Delta IEC}$  mice. Anti- $\gamma$ H2AX staining in small intestinal sections (D,E). H&E staining (F) and corresponding histological assessment (G) from colon tissue. Anti-Ki67 staining of colon swiss rolls (H) and corresponding assessment (I). TUNEL staining (J) and quantification of TUNEL (K) of colon swiss rolls. For E,I,K a minimum of 100 crypts/intestine and for G whole small intestinal swiss rolls were assessed in  $H2b^{\Delta IEC}$  (n=10; 5m, 5f) and  $H2b^{fl/fl}$  control mice (n=12; 9m,3f). Significance determined using two-tailed student's t test and expressed as the mean  $\pm$  s.e.m. \*,  $p<0.05$ ; \*\*,  $p<0.01$ ; \*\*\*,  $p<0.001$ .

#### **Figure 4 Epithelial regeneration failure in aged $H2b^{\Delta IEC}$ mice depends on p53**

Representative pictures and statistical analysis of small intestinal growth after a total of 14 days cultivation (A,B). Heat map showing clustering of top 50 up- and downregulated genes in  $H2b^{\Delta IEC}$ ,  $H2b^{fl/fl}$  and  $H2b/p53^{\Delta IEC}$  intestinal organoids (C). Gene set enrichment (KEGG) analysis of top 250 up- and downregulated genes in  $H2b/p53^{\Delta IEC}$  vs.  $H2b^{\Delta IEC}$  intestinal organoids (D). STRING-based network analysis of top 50 downregulated genes in  $H2b/p53^{\Delta IEC}$  vs.  $H2b^{\Delta IEC}$ . Genes not being connected to the central p53 hub were manually removed (E). Transcript levels in small intestinal epithelial crypts from 20 week old  $H2b^{fl/fl}$  (n=8; 5m, 3f),  $H2b^{\Delta IEC}$  (n=5; 2m, 3f) and  $H2b/p53^{\Delta IEC}$  (n=9; 4m, 5f) mice were measured by qPCR (F). Anti-Olfm4 (G,H) and anti-Ki67 (I,J) immunohistochemical assessment in small intestinal sections. A minimum of 100 crypts/intestine were assessed for G-J (n=5/genotype). Significance was determined using non-parametric Mann Whitney U Test and expressed as the mean  $\pm$  s.e.m. \*,  $p<0.05$ ; \*\*,  $p<0.01$ ; \*\*\*,  $p<0.001$ .

### Figure 5 Spontaneous intestinal tumor development in H2b/p53<sup>ΔIEC</sup> mice.

Survival curve for H2b/p53<sup>ΔIEC</sup> (n=17; 9m, 6f) , H2b/p53<sup>fl/fl</sup> (n=13; 7m, 6f) and H2b<sup>ΔIEC</sup> (n=9; 3m, 6f) mice (A). Total number of tumors per small intestine (B), average tumor size in small intestinal tumors (C) and representative picture of a H2b/p53<sup>ΔIEC</sup> small intestine bearing a total of 3 tumors (red arrows) (D). Histological grading of intestinal mucosa with or without tumors (E). Representative picture of a dysplasia or low grade carcinoma in small intestine from H2b/p53<sup>ΔIEC</sup> mice (F). Venn diagram of differentially expressed genes (DEGs) from small intestinal tissues derived from H2b/p53<sup>ΔIEC</sup> tumors (DKO T; n=4; 3m, 1f) or adjacent non tumor tissue from same mice (DKO nT, n=4; 3m, 1f) or H2B/p53<sup>fl/fl</sup> (WT, n=4; 2m, 2f). Shown are the total number of DEGs (left) as well as the number of up- and downregulated genes (right) (G). STRING-based network analysis of top 100 upregulated genes in tumor vs. non-tumor intestinal tissue from H2b/p53<sup>ΔIEC</sup> mice. Manual colouring was used to highlight genes involved in extracellular matrix degradation (orange), cellular differentiation (red) and Wnt signaling (blue) (H). qPCR Wnt target genes (relative to adjacent non-tumor small intestinal tissue, n=8) (I). Data are expressed as the mean +/- s.e.m and significance was determined using Log-Rank Mantel Cox Test (A) or non-parametric Mann Whitney U Test \*, p<0.05; \*\*, p<0.01; \*\*\*, p<0.001 \*, p<0.05; \*\*, p<0.01; \*\*\*, p<0.001.

### Figure 6 A mutational signature associated with genomic ribonucleotides

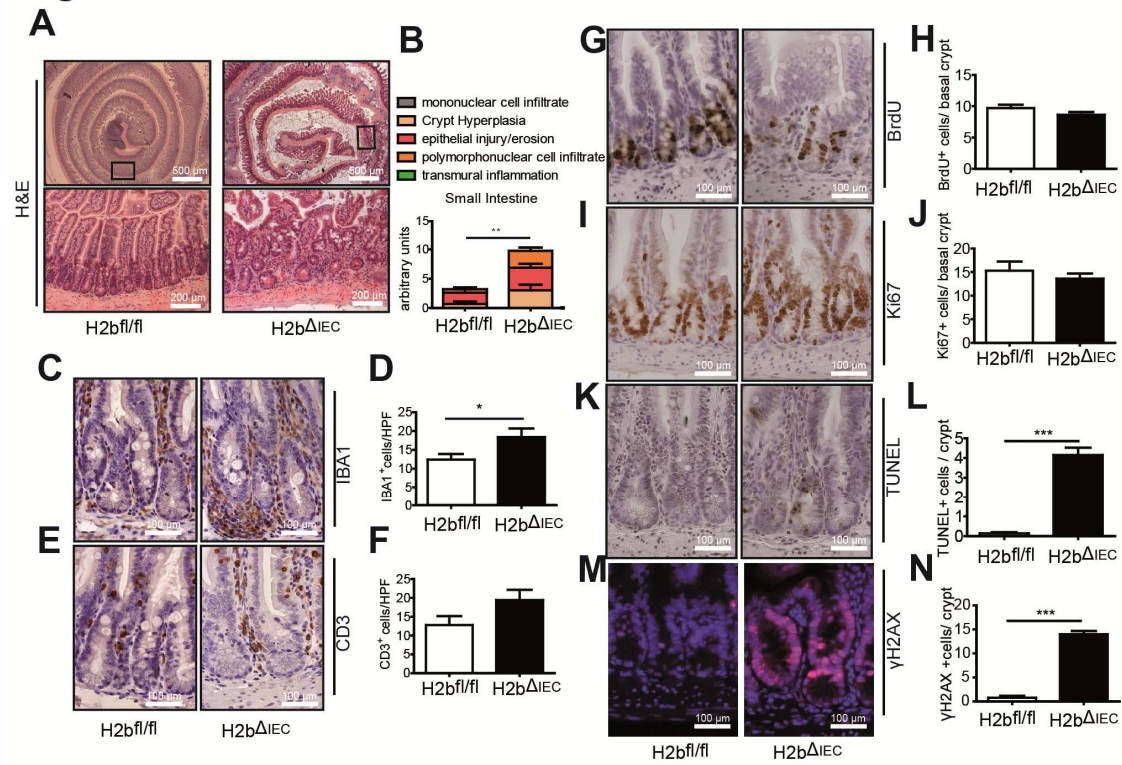
Ribonucleotide content of genomic intestinal DNA was assessed by alkaline hydrolysis and subsequent electrophoresis of fragmented DNA. Increased DNA fragmentation indicated a higher genomic ribonucleotide load. Gel image shows intestinal DNA samples from individual mice (n=3-4) (A). Quantification of fragment count per nucleotide length based on the

electrophoresis gel shown in A. Depicted graphs show the comparison of H2b/p53<sup>ΔIEC</sup> tumor vs. H2b/p53<sup>fl/fl</sup> control DNA (B). Relative contribution of mutational signatures described in the Cosmic database to individual tumor and H2b/p53<sup>ΔIEC</sup> non-tumor signatures. Note the high contribution of signature 3 to all H2b/p53<sup>ΔIEC</sup> mutational signatures, which is independent of tumor status (C). Average mutational signatures extracted from tumor and H2b/p53<sup>ΔIEC</sup> non-tumor intestinal DNA exhibit a striking degree of similarity. A distinct T>G substitution at GpTpG trinucleotides is marked by an asterisk (D).

**Figure 7 Functional characterization of somatic RNase H2 cancer variants and RNase H2 expression in human colorectal tumors**

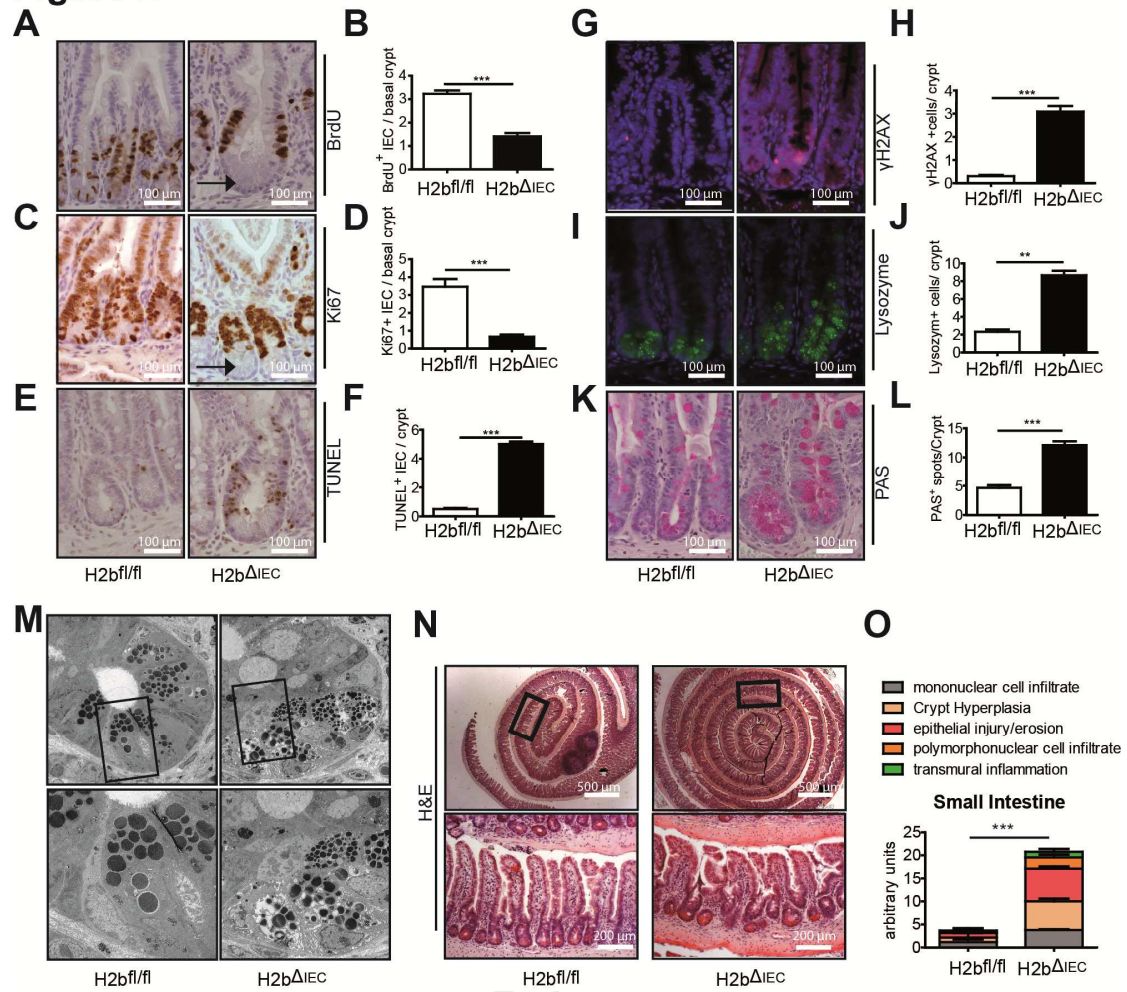
Thermal stability of mutant RNase H2 complexes relative to wild type (represented as  $\Delta T_m$ ; negative values represent a less stable complex). Mean  $\Delta T_m \pm$  s.e.m. displayed for  $n = 6$  technical replicates (A). Representative graphs of thermostability of WT and V133M mutant (B). Reduced enzymatic activity of somatic RNase H2 cancer variants towards a DNA duplex containing a single ribonucleotide (DRD:DNA) or RNA-DNA hybrid (RNA:DNA). Initial activity measured at 15.6 pM RNase H2 and 250  $\mu$ M substrate, with mean  $\pm$  s.e.m. displayed for  $n = 3$  independent experiments (C). Relative expression of RNASEH2A in paired tumor and adjacent normal tissue from colorectal carcinoma patients ( $n=155$ ) (D). Kaplan-Meier Plots for high vs. low RNASEH2A expression in  $n=467$  patients with colorectal adenocarcinoma, retrieved from the TCGA\_COADREAD cohort. Low expression levels of RNASEH2A were correlated with poor overall survival ( $p=0.004$ ) (E). Data are expressed as the mean  $\pm$  s.e.m and significance was determined using two-sided T-test (A,C) or non-parametric Mann Whitney U Test (D) or Log-Rank Mantel Cox Test (E). \*,  $p<0.05$ ; \*\*,  $p<0.01$ ; \*\*\*,  $p<0.001$ .

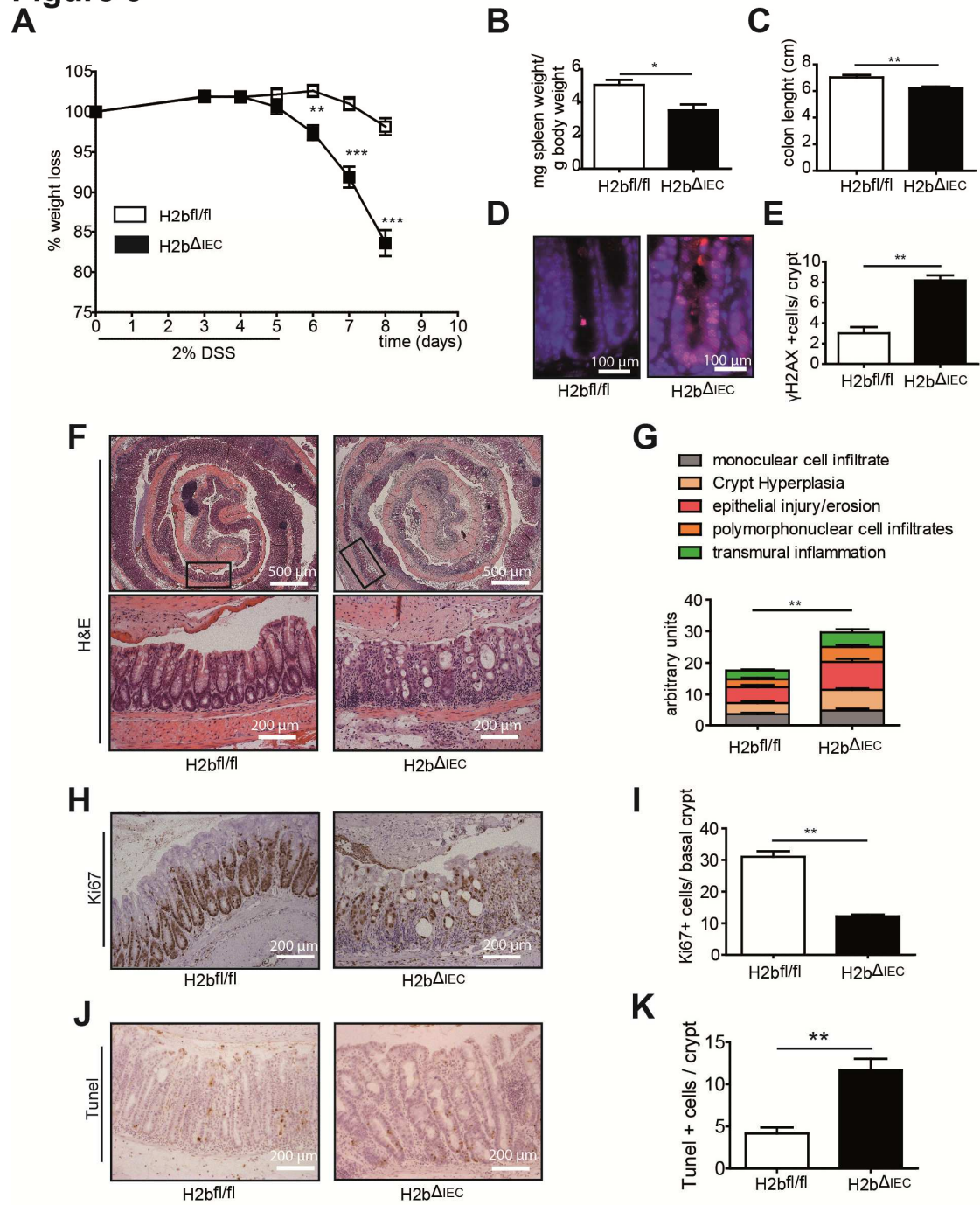


**Figure 1**

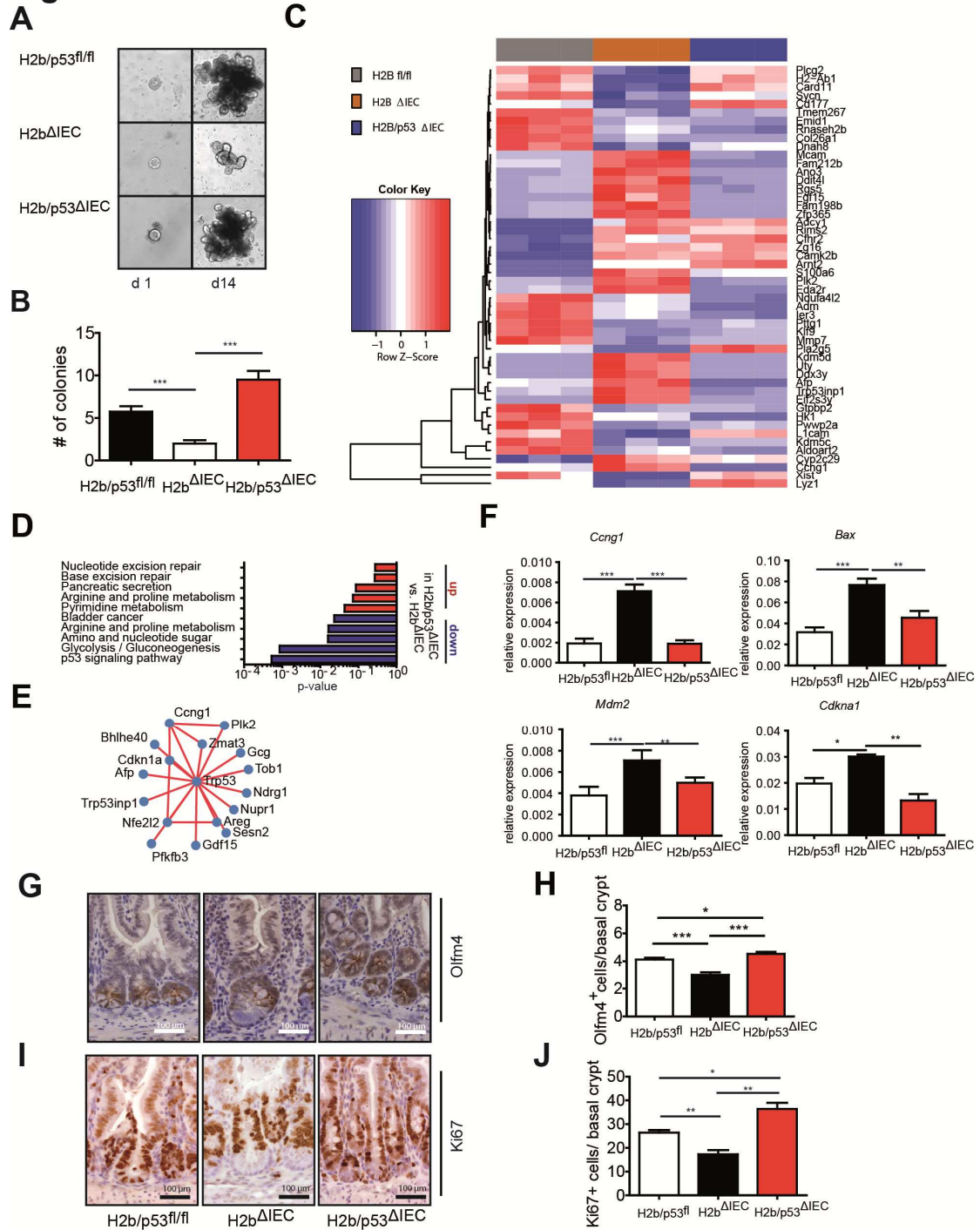


**Figure 2**

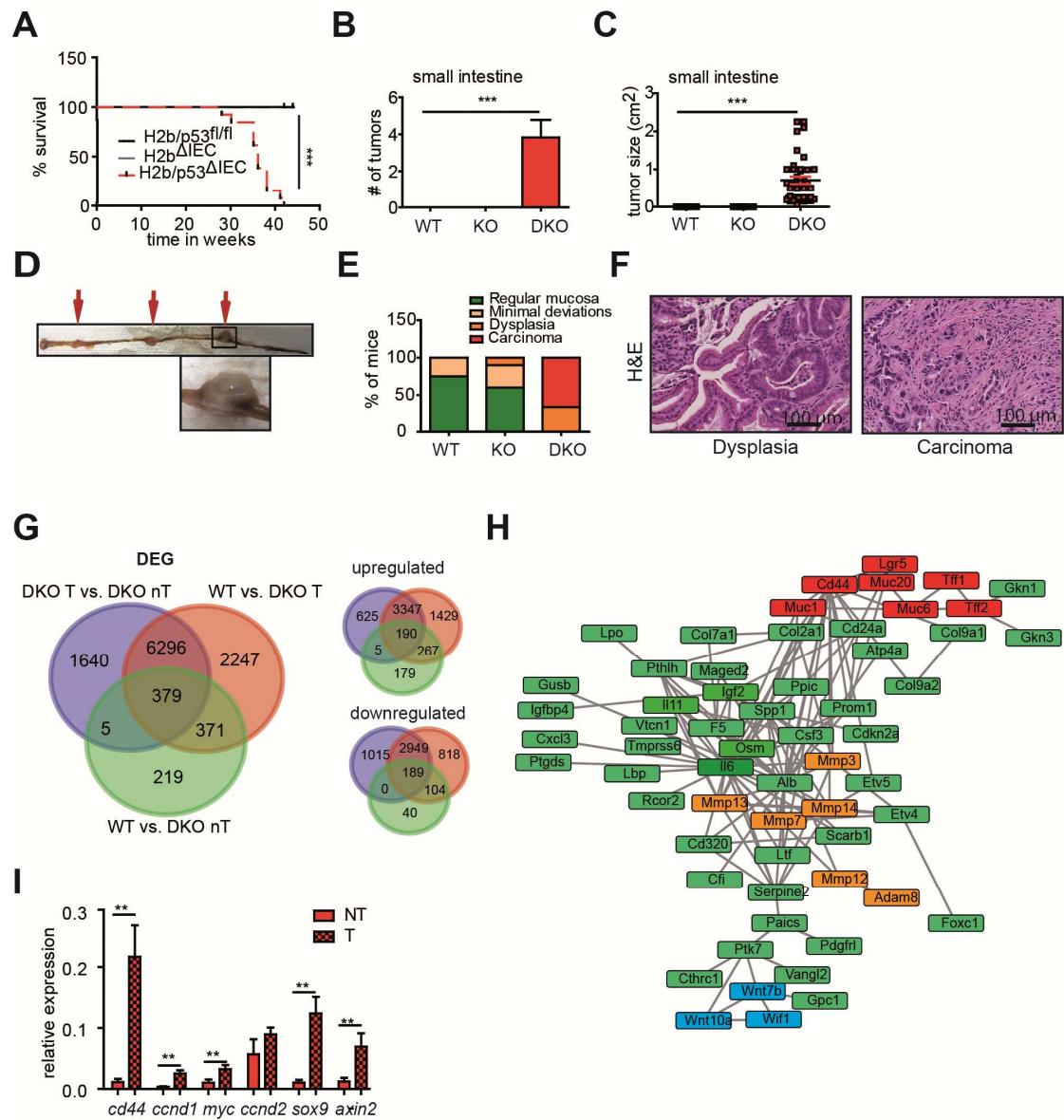


**Figure 3**

**Figure 4**

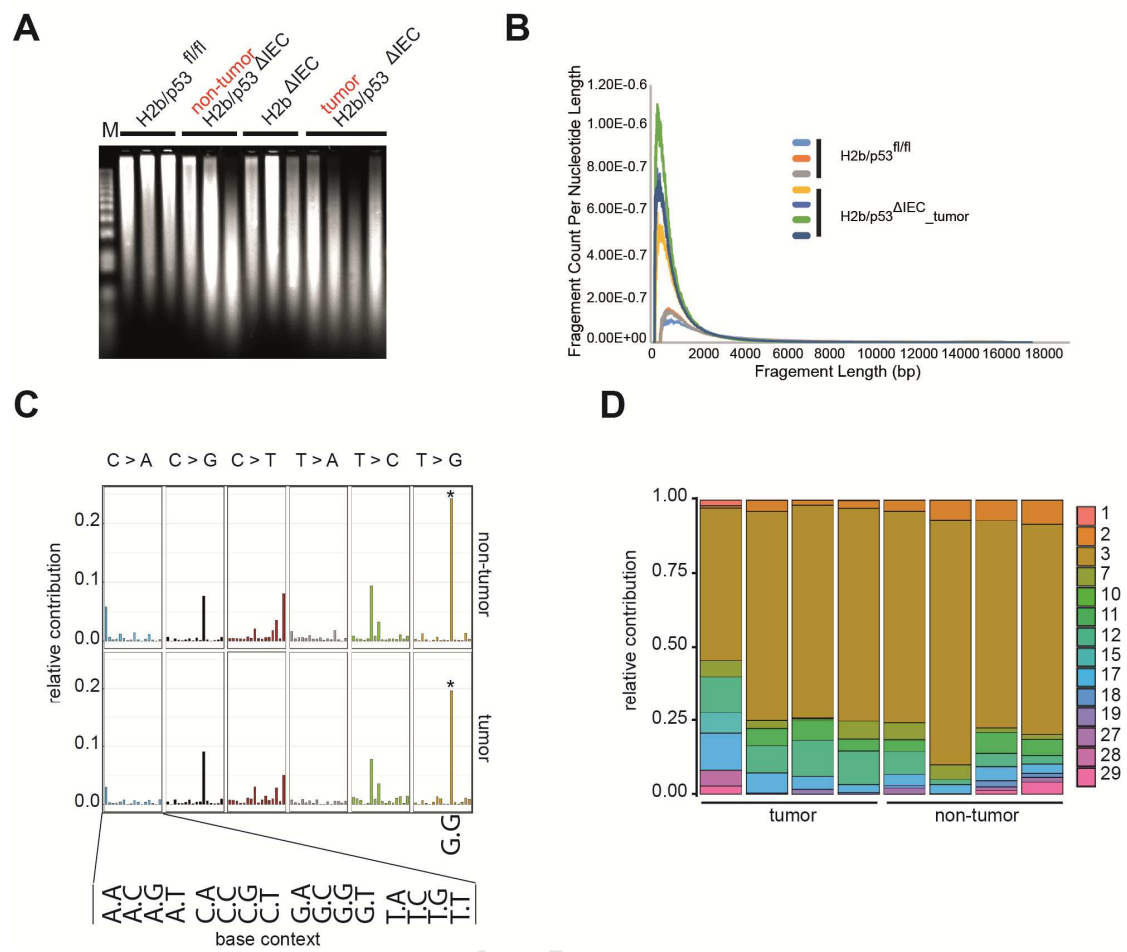


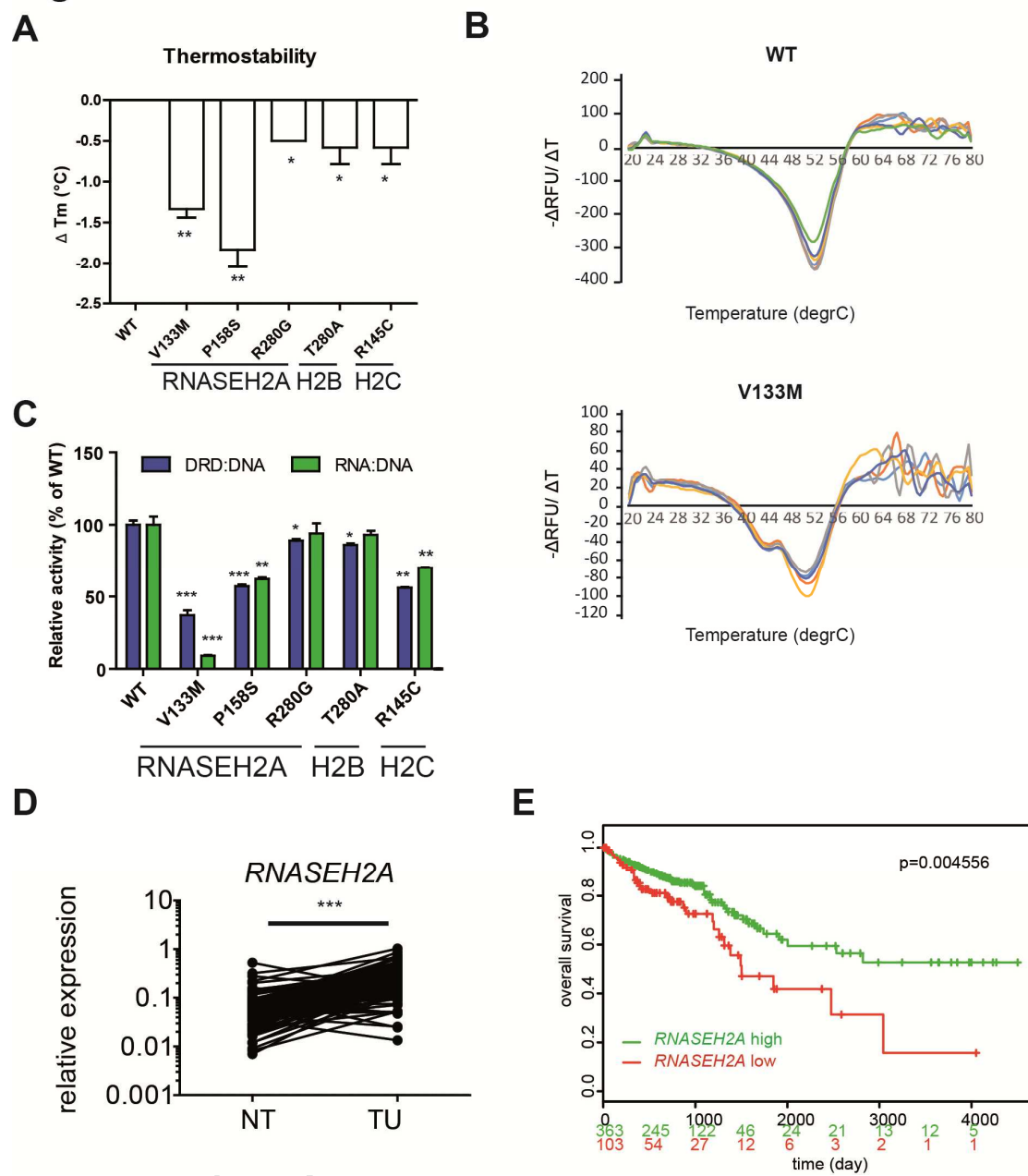
**Figure 5**





**Figure 6**



**Figure 7**

Supplementary Figures to Aden et. al. Epithelial RNase H2 Maintains Genome Integrity and Prevents Intestinal Tumorigenesis in Mice

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**Supplementary Figure 1, related to Figure 1:** *Generation of mice and genotype validation*

Generation and genotyping of  $H2b^{\Delta IEC}$  and  $H2b^{fl/fl}$  (control) mice (A). Strongly reduced RNase H2A protein levels in western blot from isolated IEC from  $H2b^{\Delta IEC}$  mice (B). Immunohistochemistry of small intestine showing lack of RNase H2A, indicating complete RNase H2 complex destruction specifically in intestinal epithelium of  $H2b^{\Delta IEC}$  mice (C). Small intestines from  $H2b^{fl/fl}$  (n=6; 4m, 2f) and  $H2b^{\Delta IEC}$  mice (n=5; 3m, 2f) display no overt differences in epithelial differentiation markers lysozyme (D,E) or PAS (F,G). Body weight (H), small intestinal length (I), colon length (J) in 8-12 week old

H2b<sup>ΔIEC</sup> (n=5; 3m, 2f) and H2b<sup>fl/fl</sup> control mice (n=6; 4m, 2f). Body weight (K), small intestinal length (L), colon length (M) in 52 week old H2b<sup>ΔIEC</sup> (n=10; 6m, 4f) and H2b<sup>fl/fl</sup> control (n=6; 3m,3f) mice. Normalized end density per million base pairs of small intestinal samples from 8-12 (young) or 52 week (old) H2b<sup>ΔIEC</sup> and H2b<sup>fl/fl</sup> mice (N). For E,G a minimum of 100 crypts/intestine were assessed for H2b<sup>ΔIEC</sup> (n=5; 3m, 2f) and H2b<sup>fl/fl</sup> control mice (n=6; 4m, 2f). Data are expressed as mean +/- s.e.m and significance was determined using non-parametric Mann Whitney U Test. \*, p<0.05; \*\*\*, p<0.001.

**Supplementary Figure 2, related to Figure 2: Colon phenotype of aged mice**

Representative pictures (A) and histological analysis of H&E sections from small intestine (B) shows moderate intestinal inflammation in H2b<sup>ΔIEC</sup> mice (A,B). Histological evaluation and representative pictures of CD3<sup>+</sup> (C,D) and IBA1<sup>+</sup> (E,F) cells in the colonic lamina propria of 52 week old H2b<sup>ΔIEC</sup> and H2b<sup>fl/fl</sup> mice. Epithelial proliferation in the colon was significantly reduced in aged H2b<sup>ΔIEC</sup> mice compared to H2b<sup>fl/fl</sup> control littermates, as evidenced by anti-BrdU (G,H) and anti-Ki67 staining (I,J). Note the lack of cellular proliferation in the intestinal stem cell niche located at the crypt base, indicated by black arrows. Increased apoptosis and DNA damage in small intestines of H2b<sup>ΔIEC</sup> mice, as revealed by TUNEL (K,L) and γH2AX (M,N) staining. For B small intestinal swiss rolls, for C,E a minimum of 5 individual HPF and for G,I,K,M a minimum of 100 crypts/intestine were assessed in 52 week old H2b<sup>ΔIEC</sup> (n=10; 6m, 4f) and H2b<sup>fl/fl</sup> control mice (n=6; 3m,3f). Data are expressed as the mean +/- s.e.m and significance was determined using non-parametric Mann Whitney U Test. \*, p<0.05; \*\*, p<0.01; \*\*\*, p<0.001. \*, p<0.05; \*\*, p<0.01; \*\*\*, p<0.001.

**Supplementary Figure 3, related to Figure 3: Chronic Colitis in H2b<sup>fl/fl</sup> and H2b<sup>ΔIEC</sup> mice.**

Weight loss curve of *RnaseH2b<sup>fl/fl</sup>* (n=8; 4m,4f) and *RnaseH2b<sup>ΔIEC</sup>* (n=9; 5m,4f) mice (A). Representative pictures of colon swiss rolls of H&E pictures (B) and corresponding histological assessment (C). Representative pictures and histological evaluation of Ki67 (D,E) and TUNEL (F,G) positive cells in colon crypts in a minimum of 100 crypts/intestine. Postmortal colon length (n=8/9) of H2b<sup>fl/fl</sup> and H2b<sup>ΔIEC</sup> mice (H). For C small intestinal swiss rolls and for E,G, a minimum of 100 crypts/intestine were assessed in H2b<sup>ΔIEC</sup> (n=8; 5m, 3f) and H2b<sup>fl/fl</sup> control mice (n=9; 4m, 5f). Significance determined using two-tailed student's t test and expressed as the mean +/- s.e.m. \*, p<0.05; \*\*, p<0.01; \*\*\*, p<0.001.

**Supplementary Figure 4, related to Figure 4: RNA sequencing of isolated intestinal epithelial cells**

Heatmap showing clustering of top 100 differentially expressed genes in isolated intestinal epithelial cells from H2b<sup>fl/fl</sup> (n=4; 2m,2f) and H2b<sup>ΔIEC</sup> (n=4; 2m,2f) (A). GO-term analysis of differentially up- and downregulated genes between H2b<sup>fl/fl</sup> (n=4) and H2b<sup>ΔIEC</sup> (n=4) (B). Western Blot from isolated intestinal epithelial cells from aged H2b<sup>fl/fl</sup> (n=5) and *eH2b<sup>ΔIEC</sup>* (n=5) probed against anti-p53 antibody(C). Representative



pictures (D) and statistical evaluation (E) of p53<sup>+</sup> cells/crypt. For E a minimum of 100 crypts/intestine were assessed in 52 week old H2b<sup>ΔIEC</sup> (n=5; 3m, 2f) and H2b<sup>fl/fl</sup> control mice (n=6; 3m,3f). Significance determined using two-tailed student's t test and expressed as the mean +/- s.e.m. \*\*, p<0.01.

**Supplementary Figure 5, related to Figure 4: Phenotyping of H2b<sup>ΔTam</sup> organoids**

Administration of a low dose of 4-OHT (100 nM) for 3 d resulted in increased cell death and induction of apoptosis and induction of canonical p53 target genes in primary intestinal organoids derived from H2b<sup>fl/fl</sup> mice bearing a ubiquitous Cre recombinase (CreERT). Representative pictures of intestinal organoids 3d after 4-OHT treatment. White bars indicate 100 μm. Black arrow indicated a dying organoid (A). Representative FACS plots (B) and statistical analysis of GeoMean intensity of Annexin V-FITC staining (C). Gene expression of intestinal organoids 3d after 4-OHT assessing *Rnaseh2b*, *Ccng1*, *Sesn2*, *Mdm2* by qPCR (D). Significance was determined using students T-Test and expressed as the mean +/- s.e.m. \*\*, p<0.01.

**Supplementary Figure 6, related to Figure 4: Phenotyping of H2b<sup>ΔTam</sup> MEF**

Administration of a low dose of 4-OHT (100 nM) for 3 d resulted in abrogation of RNASEH2B protein expression in primary MEFs derived from H2b<sup>fl/fl</sup> embryos bearing a ubiquitous Cre recombinase (CreERT). H2b<sup>fl/fl</sup> w/o CreERT were used as control cells. For conciseness 4-OHT-treated H2b<sup>fl/fl</sup> +CreERT MEFs were termed H2b<sup>ΔTam</sup> MEFs thereafter. *Rnaseh2b/p53*-double-KO MEFs<sup>1</sup> served as negative control. RNase H2 holoenzyme was detected by Western Blotting in proliferating (3 d post 4-OHT) as well as senescent (10 d post 4-OHT) MEFs using a specific rabbit antiserum raised against the whole murine enzyme complex<sup>1</sup>. Actin as loading control (A). H2b<sup>ΔTam</sup> MEFs at 10 d post 4-OHT ceased proliferation. Proliferation was assessed by measuring EdU incorporation into replicating DNA using flow cytometry. Percentage of cells in S-phase after a 4 h EdU pulse is depicted. Error bars are SEM, \*\*\*=p<0.001, t-test (n=5) (B). H2b<sup>ΔTam</sup> MEFs at 17 d post 4-OHT stained positive for senescence-associated β-galactosidase (SA-β-gal). Cells also showed an altered morphology with enlarged and flattened appearance. Scale bar, 200 μm (C). H2b<sup>ΔTam</sup> MEFs in prolonged culture exhibited increased expression of senescence-associated genes *p19*, *Cdkn1a* (*p21*) and *Igfbp5*. Transcript levels were gauged by qPCR (for *p19* 10 d, *Igfbp5* and *Cdkn1a* 17 d post 4-OHT). Error bars are SEM, \*\*\*=p<0.001, \*\*=p<0.01, 2-way-ANOVA (n=3-4) (D). Senescent H2b<sup>ΔTam</sup> MEFs displayed a senescence-associated secretory phenotype (SASP) and secreted the proinflammatory cytokines IL-6 and CXCL1 (KC). 10 d and 17 d post 4-OHT MEF supernatant was harvested for 24 h and cytokine levels were analyzed by ELISA. Note that secreted cytokine levels tended to increase over time (E). Error bars represent SEM, \*\*\*=p<0.001, 2-way-ANOVA (n=3). Increased expression of p21 protein in H2b<sup>ΔTam</sup> MEFs 3 d after Cre induction by a low dose of 4-OHT (100 nM). Doxorubicin (Doxo) treatment at a concentration of 1 μM for 24 h was used as positive control (F). Deletion of *Rnaseh2b* does not induce apoptosis in primary MEFs. Administration of 100 nM 4-OHT for indicated time points does not lead to increased cell death, as assessed by Western Blot analysis of cleaved PARP-1 (fu. - full length, 116

kDa, cl. – cleaved, 89 kDa and Caspase 3. Apoptosis in control cells was induced by Doxorubicin (Doxo) at 25  $\mu$ M for 24 h (G).

**Supplementary Figure 7, related to Figure 4: Phenotyping of 35 week old colon intestinal organoids**

Statistical evaluation and representative pictures of colon organoids, derived from 35 week old H2b/p53<sup>fl/fl</sup>, H2b <sup>$\Delta$ IEC</sup> or H2b/p53 <sup>$\Delta$ IEC</sup> mice. Statistical evaluation and representative pictures of obtained colon organoid colonies at day 4 after passaging/seeding in the absence (A,B) or presence (C,D) of the anoikis inhibitor Y-27632. Significance was determined using non-parametric Mann Whitney U Test and expressed as the mean  $\pm$  s.e.m. \*\*,  $p < 0.01$ ; \*\*\*,  $p < 0.001$ .

**Supplementary Figure 8, related to Figure 4: Phenotyping of 20 week old H2b/p53 <sup>$\Delta$ IEC</sup> mice**

Immunohistochemistry of  $\gamma$ H2AX (A,B) and TUNEL staining (C,D) in the small intestine reveals restoration of background (H2b/p53<sup>fl/fl</sup>) apoptosis levels in H2b/p53 <sup>$\Delta$ IEC</sup> double KO mice, albeit a similar degree of DNA damage. For A,C a minimum of 100 crypts/intestine were assessed in 20 week old H2b<sup>fl/fl</sup> (n=8; 5m, 3f), H2b <sup>$\Delta$ IEC</sup> (n=5; 2m, 3f) and H2b/p53 <sup>$\Delta$ IEC</sup> (n=9; 4m, 5f). Significance was determined using non-parametric Mann Whitney U Test and expressed as the mean  $\pm$  s.e.m. \*\*\*,  $p < 0.001$ .

**Supplementary Figure 9 RNA sequencing of intestinal tumor and non-tumor tissue from H2b/p53 <sup>$\Delta$ IEC</sup> mice**

Representative picture of small intestinal tumors in H2b/p53 <sup>$\Delta$ IEC</sup>, but not H2b/p53<sup>fl/fl</sup> or H2b <sup>$\Delta$ IEC</sup> mice (A). RNA sequencing was performed from the RNA of small intestinal sections of H2b/p53<sup>fl/fl</sup> (n=4, 3f, 1m) and paired tumor/non-tumor sections of H2b/p53 <sup>$\Delta$ IEC</sup> (n=4, 2m, 2f) animals. Overview of selected signaling pathways (GO terms and KEGG pathways) enriched in H2b/p53 <sup>$\Delta$ IEC</sup> tumors as compared to adjacent non tumor-tissue (B). Heatmap of the top 100 differentially expressed genes, ranked according to adjusted p-value (C). Representative immunohistochemistry staining of small intestinal tissue stained against TCF-4 (D) and SOX9 (E). Pictures indicate increased nuclear translocation (TCF-4) or overall expression (SOX9) in tumors from H2b/p53 <sup>$\Delta$ IEC</sup> mice.

**Supplementary Figure 10 Alkali-Hydrolysis of intestinal samples**

Quantification of fragment count per nucleotide length based on the electrophoresis gel shown in Figure 6 A. Depicted graphs show the comparison of H2b <sup>$\Delta$ IEC</sup> vs. H2b/p53<sup>fl/fl</sup> control DNA (A) and H2b/p53 <sup>$\Delta$ IEC</sup> non tumor vs. H2b/p53<sup>fl/fl</sup> (B). End density per million base pairs of small intestinal samples from young H2b/p53 <sup>$\Delta$ IEC</sup> or aged H2b/p53 <sup>$\Delta$ IEC</sup> mice (tumor vs. adjacent normal), normalized to control DNA from H2b/p53<sup>fl/fl</sup> (C).

**Supplementary Figure 11 Mutational signature in intestinal tumor and non-tumor tissue from H2b/p53 <sup>$\Delta$ IEC</sup> mice**

The figure shows the contribution of each SNV type including the base context to the somatic mutational signature of each sample. Base context is magnified and shown for C>A conversion, but applies to all depicted nucleotide SNV`s.

**Supplementary Figure 12** *Gene expression and InDel count*

Multi-dimensional scaling (MDS) plots based on InDels (A) , SNVs (B) or RNA sequencing data (C).

Network analysis integrating either somatic SNV (E) or InDels (F) with genes differentially expressed between tumor and non-tumor H2b/p53<sup>ΔIEC</sup> epithelium samples. Note that the majority of dysregulated genes clustered in the centre, while most genes affected by an InDel or an SNV were localized to the periphery, with little connectivity between both datasets. For a better readability, exclusively dysregulated genes having more than 200 connected dysregulated genes or a cancer proliferation indices sum of connected genes higher 60 were displayed (E,F).

Network based analysis of the difference between dysregulated and mutated genes. As an input all significantly dysregulated genes (tumor vs. non-tumor,  $p < 0.001$ ) and all genes affected by a somatic SNV or a somatic InDel were considered. Like shown in the boxplot, dysregulated genes were characterized by a higher number of connections than mutated genes ( $p(\text{dysregulated vs InDel}) = 0.023$ ,  $p(\text{dysregulated vs SNV}) = 0.152$ ,  $p(\text{dysregulated vs (SNV + InDel)}) = 0.011$ ) (G).

**Supplementary Figure 13** *InDel count*

The figure displays the number of InDels for each InDel length subdivided into sample type groups. Negative InDel lengths indicate deletions, while positive values describe insertions.

**Supplementary Figure 14** *In-silico validation in COADRED cohort*

RNASEH2A expression in primary tumor (n=380) or normal solid tissue (n=51) based on normalized read counts from RNA sequencing (Illumina HiSeq). Data were retrieved from the COADRED cohort of the TCGA and made publically available via the webportal ([www.xenabrowser.net](http://www.xenabrowser.net)). Significance was determined using Mann-Whitney test. \*\*\*,  $p < 0.001$ .

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## Supplemental Tables

### Table S1 Upregulated genes in intestinal epithelial crypts in aged $H2b^{\Delta IEC}$ mice

Significantly ( $P < 0.05$ ) upregulated genes from isolated epithelial crypts of  $H2b^{\Delta IEC}$  compared to epithelial crypts from  $H2b^{fl/fl}$  mice. "padj" is the  $P$  value adjusted using the Benjamini-Hochberg method.

### Table S2 Downregulated genes in intestinal epithelial crypts in aged $H2b^{\Delta IEC}$ mice

Significantly ( $P < 0.05$ ) downregulated genes from isolated epithelial crypts of  $H2b^{\Delta IEC}$  compared to epithelial crypts from  $H2b^{fl/fl}$  mice. "padj" is the  $P$  value adjusted using the Benjamini-Hochberg method.

### Table S3 Upregulated genes in small intestinal organoids from $H2b/p53^{\Delta IEC}$ compared to $H2b^{\Delta IEC}$

Significantly ( $P < 0.05$ ) upregulated genes in  $H2b/p53^{\Delta IEC}$  small intestinal organoids, compared to  $H2b^{\Delta IEC}$  small intestinal organoids. "padj" is the  $P$  value adjusted using the Benjamini-Hochberg method.

### Table S4 Downregulated genes in small intestinal organoids from $H2b/p53^{\Delta IEC}$ compared to $H2b^{\Delta IEC}$

Significantly ( $P < 0.05$ ) downregulated genes in  $H2b/p53^{\Delta IEC}$  small intestinal organoids, compared to  $H2b^{\Delta IEC}$  small intestinal organoids. "padj" is the  $P$  value adjusted using the Benjamini-Hochberg method.

### Table S5 Upregulated genes in small intestinal tumors from $H2b/p53^{\Delta IEC}$ compared to adjacent non-tumor tissue

Significantly ( $P < 0.05$ ) upregulated genes from small intestinal tissue (tumors vs. non-tumor) isolated from  $H2b/p53^{\Delta IEC}$  mice. "padj" is the  $P$  value adjusted using the Benjamini-Hochberg method.

### Table S6 Downregulated genes in small intestinal tumors from $H2b/p53^{\Delta IEC}$ compared to adjacent non-tumor tissue

Significantly ( $P < 0.05$ ) downregulated genes from small intestinal tissue (tumors vs. non-tumor) isolated from  $H2b/p53^{\Delta IEC}$  mice. "padj" is the  $P$  value adjusted using the Benjamini-Hochberg method.

### Table S7 List of exonic, somatic indels

The table contains all exonic, somatic indels, which were called in the tumor sample but not in the corresponding liver or non-tumor samples

### Table S8 List of exonic, somatic SNVs

The table contains all exonic, somatic SNVs, which were called in the tumor sample, but were supported by less than five percent of the reads at this position in the corresponding liver and non-tumor samples.

**Table S9 Tumor mutations from Cosmic Database**

Somatic RNase H2 tumor variants in all three subunits were extracted from the COSMIC database based on sample frequency (with 4 being the highest number of affected tumor samples), tumor site (mutations in GI tract tumors were favoured) or for structural reasons (e.g. the RNASEH2A R280G variant was chosen because the mutation is located within the RNASEH2A C-terminus which is crucial for RNase H2 complex formation).

**Table S10 Clinical characteristics of 122 tumor samples**

Clinical characteristics of n=122 CRC paired tumor samples were assessed and correlated with the expression of *RNASEH2A* expression in the tumor samples.

## Supplemental Materials and Methods:

### cDNA synthesis and gene expression analysis

mRNA isolation of PBS washed cells, snap frozen tissue and PBS washed Matrigel containing organoids was performed using RNEasy Kit (Qiagen, Hilden, Germany). cDNA synthesis was performed using RevertAid Premium cDNA Synthesis Kit (Fermentas) according to manufacturer's protocol. Gene expression was subjected to the cDNA samples using SYBR Green qRT-PCR or TaqMan assays which were purchased from Applied Biosystems. Reactions were carried out on the PRISM Sequence 7700 Detection System (Applied Biosystems, Foster City, USA), and relative transcript levels were determined using Actb (TaqMan and Sybr Green) and Gapdh (Sybr Green) as a housekeeper. A list of all TaqMan is below.

### TaqMan Probes and Primers

Gene Name	Symbol	Species	TaqMan Probe ID
Axin2	Axin2	murine	00443610
BCL2-associated X protein	Bax	murine	00432051
Bmi1 polycomb ring finger oncogene	Bmi1	murine	03053308
Ccnd2	Ccnd2	murine	00438070
Cyclin D1	Ccng1	murine	00432359
Cd44	Cd44	murine	01277161
cyclin-dependent kinase inhibitor 1A (P21)	cdkn1a	murine	04205640
CHGA	Chromogranin A	murine	00154441
HOP homeobox	Hopx	murine	00558630
leucine rich repeat containing G protein coupled receptor 5	Lgr5	murine	00438905
leucine-rich repeats and immunoglobulin-like domains 1	Lrig1	murine	00456116
Lysozym	LysZ	murine	00657323
transformed mouse 3T3 cell double minute 2	Mdm2	murine	01233138
male-specific lethal 1 homolog	Msl1	murine	01303585
mucin 2	MUC2	murine	00458299
myelocytomatosis oncogene	Myc	murine	00487804
olfactomedin 4	Olfm4	murine	00197437
SPARC related modular calcium binding 2	Smoc2	murine	00491553
SRY (sex determining region Y)-box 9	Sox9	murine	00448840
$\beta$ -actin	Actb	murine	007393.1

### Tamoxifen-induced knockout of RNaseH2 in RNaseH2<sup>ATam</sup> murine embryonic fibroblasts (MEFs)

MEFs derived from H2b<sup>fl/fl</sup>; ERT-Cre<sup>+</sup> (RNase H2<sup>ATam</sup>) embryos were generated as previously described<sup>2</sup>. Early-passage MEFs were cultivated in Dulbecco's modified Eagle's Medium (DMEM, high Glucose (4,5 g/l), with stable Glutamine) supplemented



with 10% FCS (v/v), 1% (v/v) Penicillin and 1% (v/v) Streptomycin at 37°C. MEFs were held at 5% CO<sub>2</sub> and physiological O<sub>2</sub> levels (3%). For conditional depletion of the *RnaseH2b* gene H2b<sup>ΔTam</sup> MEFs were treated for 3 d with 100 nM 4-Hydroxytamoxifen (4-OHT, Sigma Aldrich, H7904, stock: 500 μM in DMSO). 3 d after 4-OHT treatment medium was changed and cells were further cultured until reaching senescence. MEFs derived from H2b<sup>fl/f</sup> littermate embryos served as controls.

#### Assessment of cellular senescence

Senescence-associated activity of acidic β-galactosidase was measured using the Senescence Detection Kit (Biovision) according to manufacturer's instructions. Lack of proliferation in senescent cells was assessed by EdU incorporation into replicating DNA. To that end, 10 d after 4-OHT treatment RNase H2<sup>ΔTam</sup> MEFs were subjected to a 4 h EdU pulse and EdU content of genomic DNA was quantified with the Click-iT EdU Flow Cytometry Assay Kit (Invitrogen). Stained cells were analyzed using a BD Biosciences FACS Canto flow cytometer and FlowJo 10. To assess cytokine concentration in cell supernatants MEFs were plated in 6-wells and incubated with 600 μl of fresh medium for 24 h. Removed cell-free supernatant was analyzed for murine IL-6 and CXCL10 by ELISA according to manufacturer's instructions (both R&D Systems). For quantification of ELISA data the amount of secreted protein was normalized to the number of proliferating and senescent cells.

#### Transmission electron microscopy

For electron microscopy, tissue was fixed at 4°C with 3% glutaraldehyde, washed with PBS, exposed to 2 % osmium tetroxide for 30 min, dehydrated in series with increasing ethanol concentrations and embedded in Araldite. Ultrathin (60 nm) sections were cut, mounted on carbon-coated copper grids (Science Service GmbH, München, Germany) and contrasted with saturated solution of uranyl acetate (Merck KGaA, Darmstadt, Germany) in H<sub>2</sub>O. The grids were examined with a JEOL 1400 plus transmission electron microscope at 120 kV operating voltage.

#### Immunohistochemistry and immunofluorescence

For immunohistochemical staining, 5 μm sections of paraffin-embedded colon/ileum swiss rolls were deparaffinized with Xylol substitute (Roth), incubated in citrate buffer for 3 minutes and subsequently blocked with blocking serum (Vectastain) for 20 minutes. For anti-BrdU staining mice were pulsed with 10 mg/kg bodyweight BrdU 1.5 h before sacrifice. Primary BrdU- (BD Pharmingen) were incubated over night. Antibodies used were mouse anti-Ki67 (1:100 dilution; Novocastra), rabbit anti-Sox9 (1:600 dilution; Chemicon), mouse anti-Tcf4 (1:250 dilution; Millipore), β-catenin (BD Transduction labs). Incubation of antibodies was performed overnight in BSA in PBS at 4 °C for antibodies directed against BrdU, and Tcf4 and for 1 hour at room temperature for antibodies directed against Ki67, β-catenin, Sox9 and lysozyme. In all cases, the Envision<sup>+</sup> kit (Dako) was used as a secondary reagent. Stainings were developed with DAB. Slides were counterstained with haematoxylin and mounted. Sections were washed, incubated with secondary antibodies and DAB substrate (Vectastain ABC Kit). For PAS staining slides were dehydrated, rinsed for 5 min. with aqua and 0.5% periodic acid respectively and incubated with Schiff's reagent for 1 min. Schiff's reagent was



rinsed of for 5 min and slides were counterstained with hematoxylin. For TUNEL assay, slides were subjected to Apop Tag Plus Peroxidase *In Situ* Apoptosis Detection Kit (Merck Millipore) according to manufacturer's protocol. Slides were visualized by an AxioImager Z1 microscope (Zeiss, Jena, Germany). Pictures were captured by a digital camera system (AxioCam HrC/HrM, Zeiss). Measurements were made using a semi-automated image analysis software (AxioVision version 08/2013).

### **For *in situ* hybridization**

Freshly isolated intestines were flushed with formalin (4% formaldehyde in PBS) and fixed by incubation in a tenfold excess of formalin overnight at room temperature. The formalin was removed and the intestines washed twice in PBS at room temperature. The intestines were then transferred to a tissue cassette and dehydrated by serial immersion in 20-fold volumes of 70%, 96% and 100% EtOH for 2 hours each at 4°C. Excess ethanol was removed by incubation in xylene for 1.5 hour at room temperature and the cassettes then immersed in liquid paraffin (56°C) overnight. Paraffin blocks were prepared using standard methods. For *in situ* hybridization, 8 µm-thick sections were rehydrated as described above. Afterward, the sections were treated with 0.2 M sodium chloride and proteinase K. Slides were post fixed, and sections were then demethylated with acetic anhydride and prehybridized. Hybridization was done in a humid chamber with 500 ng/ml freshly prepared digoxigenin (DIG)-labeled RNA probe of Olfm4 (image clone 1078130) Sections were incubated for at least 48 hours at 68 °C. The slides were washed and incubation of the secondary anti-DIG antibody (Roche) was done at 4 °C overnight. The next day, sections were washed and developed using Nitro Blue Tetrazolium Chloride/5-Brom-4-Chlor-3-Indolyl-Phosphat. Slides were visualized by an AxioImager Z1 microscope (Zeiss, Jena, Germany). Pictures were captured by a digital camera system (AxioCam HrC/HrM, Zeiss). Measurements were made using a semi-automated image analysis software (Axiovision version 08/2013).

### **Antibodies and reagents**

Antibodies targeting γH2A.X (Cell Signaling Technology, #2577), murine RNase H2 holo enzyme<sup>1</sup>, p53 (Leica Biosystem, NCL-p53-CM5p) and β-Actin (Cell Signaling Technology, #4967) were used for immunoblot assay. Antibodies used for immunohistochemistry are listed separately in the Immunohistochemistry section.

### **Immunoblot analysis**

Cells are lysed using SDS-based DLB buffer + 1 % Halt™ Protease inhibitor cocktail (ThermoFischer Scientific, Steinheim, Germany) before heating on 95°C for 5 min and followed by ultrasonification for 5 s twice. To remove cell remnants, lysates were centrifuged at 16.000 x g for 15 min at 4°C. For protein extraction of organoids, Matrigel was removed by several centrifugation steps at 4°C followed by lysis as described above. Afterwards, equal amounts of lysates containing Laemmli buffer were heated at 95°C and electrophoresed on 12% polyacrylamide gels under standard SDS-polyacrylamide gel electrophoresis conditions before being transferred onto a polyvinylidene fluoride membranes (GE Healthcare). Protein loaded membranes were blocked with 5 % milk in TBS-T, incubated with primary antibody overnight and with HRP-conjugated secondary

antibody for 1 h at indicated concentrations. Proteins were detected using Amersham ECL Prime Western Blot Detection Reagent (GE Healthcare, Freiburg).

### Cultivation of intestinal organoids

Mouse intestinal organoids were cultivated as described before<sup>3</sup>. In brief, small intestine was removed and cleared of intestinal content by flushing the intestine with HBSS (w/o). After removal of residual fat and Peyer's patches the intestine was cut longitudinally and then laterally in pieces of 0.5 cm. Intestinal pieces were incubated in ice cold PBS + 10 nM EDTA for 10 min for 4 times, intermitted by vigorous shaking and replacement with fresh PBS + 10 nM EDTA after every shaking process. The crypt suspension was then strained through a 100µm strainer, followed by a spin with 1200 rpm at +4°C. Pure epithelial crypts were resuspended in BD Matrigel® (BD Bioscience/Heidelberg, Germany) to a concentration of 5-10 crypts/1µl Matrigel, embedded in 24-well plates and cultivated in intestinal stem cell medium (IntestiCult™ Organoid Growth Medium (Mouse) based on previously described organoid medium containing murine EGF, murine Noggin and human R-Spondin 1<sup>3</sup>. Medium was changed every other day and organoids were stimulated after 7 days of cultivation. For murine colon organoids pure epithelial crypts were suspended in BD Matrigel® (BD Bioscience/Heidelberg, Germany) to a concentration of 5-10 crypts/1µl Matrigel, embedded in 24-well plates and cultivated in L-WRN conditioned medium (L-WRN cells are kindly provided by Markus Tschurtschenthaler, Munich) in the presence or absence of anoikis inhibitor Y-27632. Medium was changed every day or other day and passage was performed every 3 to 5 days. For colon colony formation assay, a total of 10.000 cells were seeded in 40 µl matrigel and the number of grown colonies was assessed at day 4 and day 10 after seeding.

### Transcriptome analysis

Total RNA samples from isolated intestinal epithelial crypts of H2b<sup>fl/fl</sup> (n=4) and H2b<sup>ΔIEC</sup> (n= 4) or whole small intestinal pieces from non-tumorous mucosa H2b<sup>fl/fl</sup> (n=4), p53/H2b<sup>ΔIEC</sup> (n= 4) or small intestinal tumor tissue from p53/H2b<sup>ΔIEC</sup> (n= 4) were sequenced on Illumina HiSeq4000 using Illumina stranded TruSeq protocol (GEO Project Accession Number: GSE111318). An average of ~40 million 75-nt paired-end reads was sequenced for each sample. Raw reads were pre-processed using cutadapt<sup>4</sup> to remove adapter and low quality sequences and were then aligned to the mm10 (GrCm38) reference genome with Ensemble gene annotation using TopHat2<sup>5</sup>. Gene expression values of the transcripts were computed by HTSeq<sup>6</sup>. Differential gene expression levels were analyzed and visualized by the Bioconductor package DESeq2<sup>7</sup>. In order to interpret the biological significance of the differentially expressed genes (up- and down-regulated), Gene Ontology (GO) enrichment analysis performed to investigate their functional distribution using the InnateDB database ([www.innatedb.com](http://www.innatedb.com))<sup>8</sup>. Transcription factor binding sites (TFBS) that were overrepresented in the promoter region of differentially expressed genes (up- and down- regulated) were identified by innateDB<sup>8</sup>, integrating predicted transcription factor binding site data from the CisRED database ([www.cisred.org](http://www.cisred.org))<sup>9</sup>.

### **Method for statistical treatment of end density for 8 week vs 52 week mice.**

Fluorescence intensity as a function of migration distance was determined for each SybrGold stained alkali-treated DNA sample using Image Quant. These results were blank subtracted and fragment length was determined with both 1KB and 100BP ladders as standards. The median fragment length for each individual sample was calculated, then averaged for isogenic samples. IEC samples were normalized to the isogenic paired fl/fl sample (uninduced; i.e. nominally WT for Rnase H2) to account for the background of alkali-sensitive sites that are due to IEC H2b or H2b/P53 KO. Error bars describe compounded standard deviations of the normalized end densities.

### **RNase H2 purification and activity assay**

Recombinant RNase H2 was expressed in Rosetta-2 cells using a polycistronic construct (pMAR22) based on pGEX6P1 and purified by affinity purification as previously described<sup>10</sup>. Site-directed mutagenesis to introduce the following mutations was performed using the Quikchange method: RNASEH2A-V133M, P158S and R280G, RNASEH2b-T280A and RNASEH2C-R145C. Substrate was formed by annealing a 3'-fluorescein-labelled oligonucleotide (GATCTGAGCCTGGGaGCT; uppercase DNA, lowercase RNA) to a complementary 5' DABCYL-labelled DNA oligonucleotide (Eurogentec) by heating for 5 min at 95°C followed by slow cooling to room temperature<sup>10</sup>. To measure enzyme activity purified recombinant RNase H2 (at a range of concentrations between 0.001 and 1 nM) was incubated with 250 nM of substrate in 100 µl reactions (60 mM KCl, 50 mM Tris-HCl pH 8, 10 mM MgCl<sub>2</sub>, 0.01% BSA, 0.01% Triton X-100) at 24 ± 2°C for 90 min in 96-well flat-bottomed plates. Fluorescence was read every 5 min for 100 ms using a VICTOR2 1420 multilabel counter (Perkin Elmer), with a 480 nm excitation filter and a 535 nm emission filter. Relative activities were determined by comparing the slopes of the initial linear substrate conversion rates for wildtype and mutant RNase H2.

### **Thermofluor protein stability assay**

Thermal stability assays were performed using the fluorescence-based thermal shift (ThermoFluor) method<sup>11</sup> as previously described<sup>10</sup> with minor modifications. Proteins were diluted in 50 µl volumes to 2 µM in 50 mM Tris-HCl pH7.5, 150 mM NaCl, 1 mM EDTA, 1 mM DTT, and 5x SYPRO Orange (Invitrogen). Assays were carried out in a Bio-Rad iQ5 rtPCR Thermocycler, heating the samples from 20 °C to 80 °C at 0.5 °C increments, holding each temperature for 30 s. Fluorescence intensity was measured in relative fluorescence units (RFU) using excitation/emission wavelengths of 485 nm/575 nm. Thermal denaturation graphs were plotted as a function of the gradient of protein unfolding [d(RFU)/dT] against the temperature gradient, with the melting temperature (T<sub>m</sub>) defined as the temperature at the maximum of d(RFU)/dT.

### **Induction of colitis, determination of clinical scores and histology**

For acute colitis induction, mice were supplied with 2% of DSS (molecular mass 40 kDa; TdB consultancy, Uppsala, Sweden) dissolved in drinking water for 5 days followed by 5 days of regular drinking water. Disease Activity Index (DAI) was obtained as described previously<sup>12</sup>. Consumption of drinking water was measured daily. For induction of chronic DSS colitis, mice were supplied with 1% DSS for three cycles of 7 days followed by 14 days of regular drinking water. Histopathological and analyses were performed according to standard methods. Histological scoring was performed in a blinded fashion by two independent observers and displays a combination of inflammatory cell infiltration, epithelial cell damage and transmural inflammation, as described elsewhere<sup>13</sup>.

#### Online database expression analysis using

The publically available web-based tool <https://xenabrowser.net/> was used to i) assess tissue (tumor vs. solid normal) specific expression of *RNASEH2A* and ii) for association analysis of *RNASEH2A* expression in CRC tumor samples with clinical and molecular denominators of CRC in subtypes in the colorectal cancer cohort of the “The Cancer Genome Atlas” (COADREAD), as described previously<sup>14</sup>. Tumor *RNASEH2A* expression was compared in non-paired tumor vs. solid normal tissue or was associated with i) microsatellite instability, ii) histological cancer type (rectal adenocarcinoma, rectal mucinous adenocarcinoma, colon adenocarcinoma, colon mucinous adenocarcinoma), iii) loss of mismatch repair protein expression (MLH1, MSH2, MSH6, PMS2), as defined by IHC and iv) pathologic TNM stage. Statistical significance was determined using one-way Anova test.

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**Figure S1**

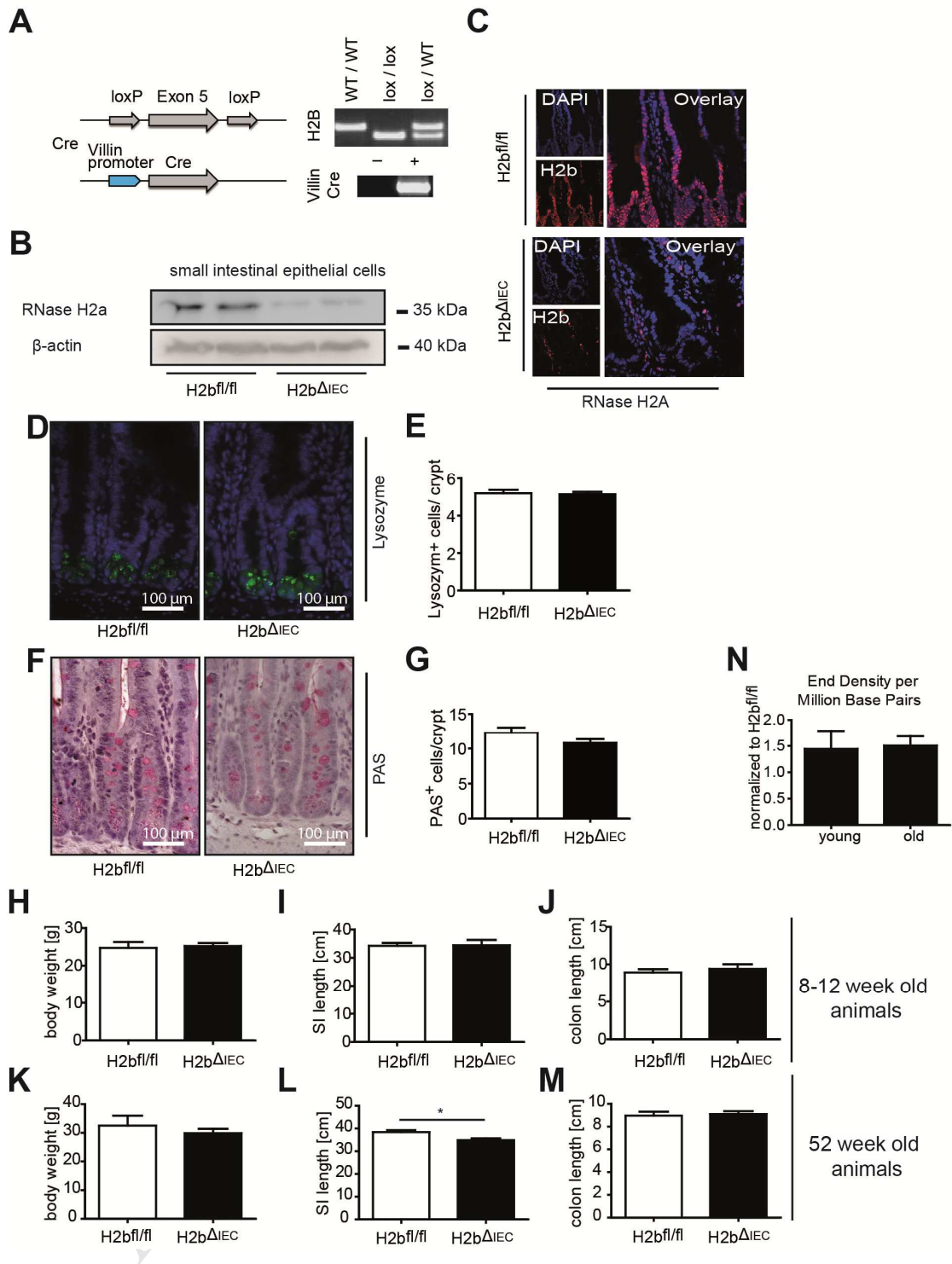
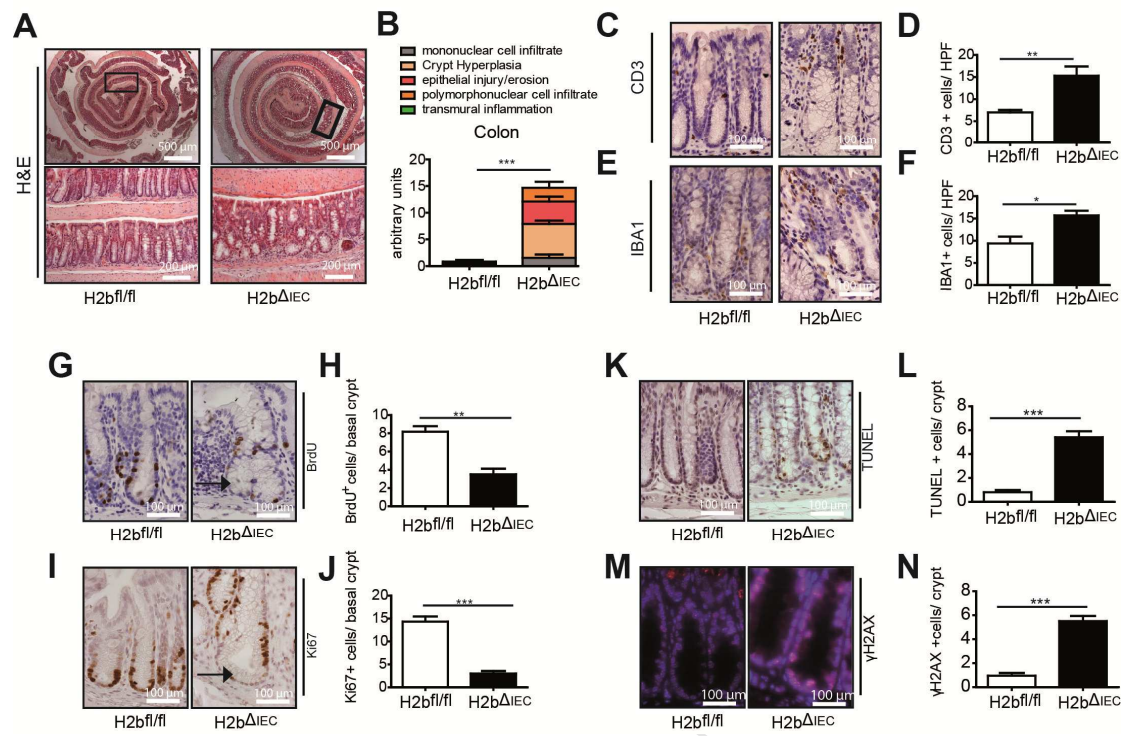
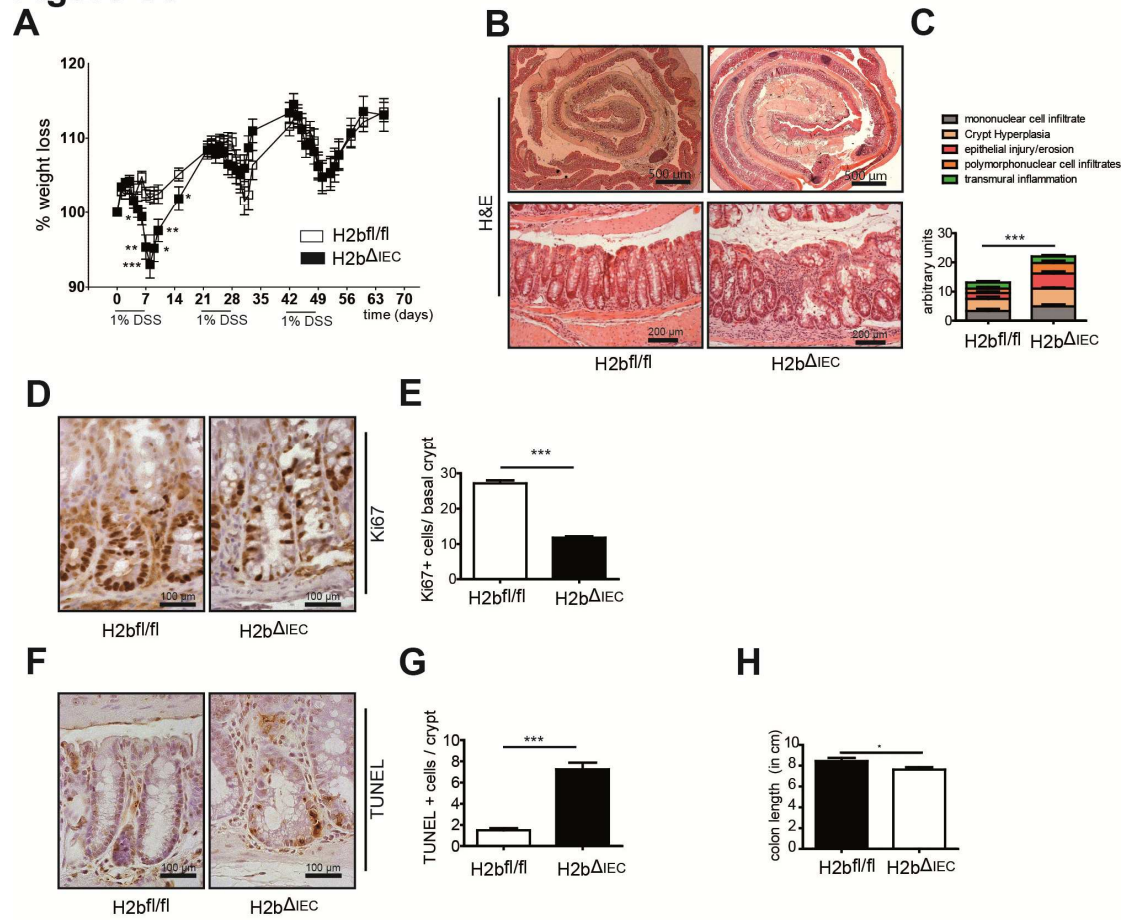




Figure S2



**Figure S3**





**Figure S4**

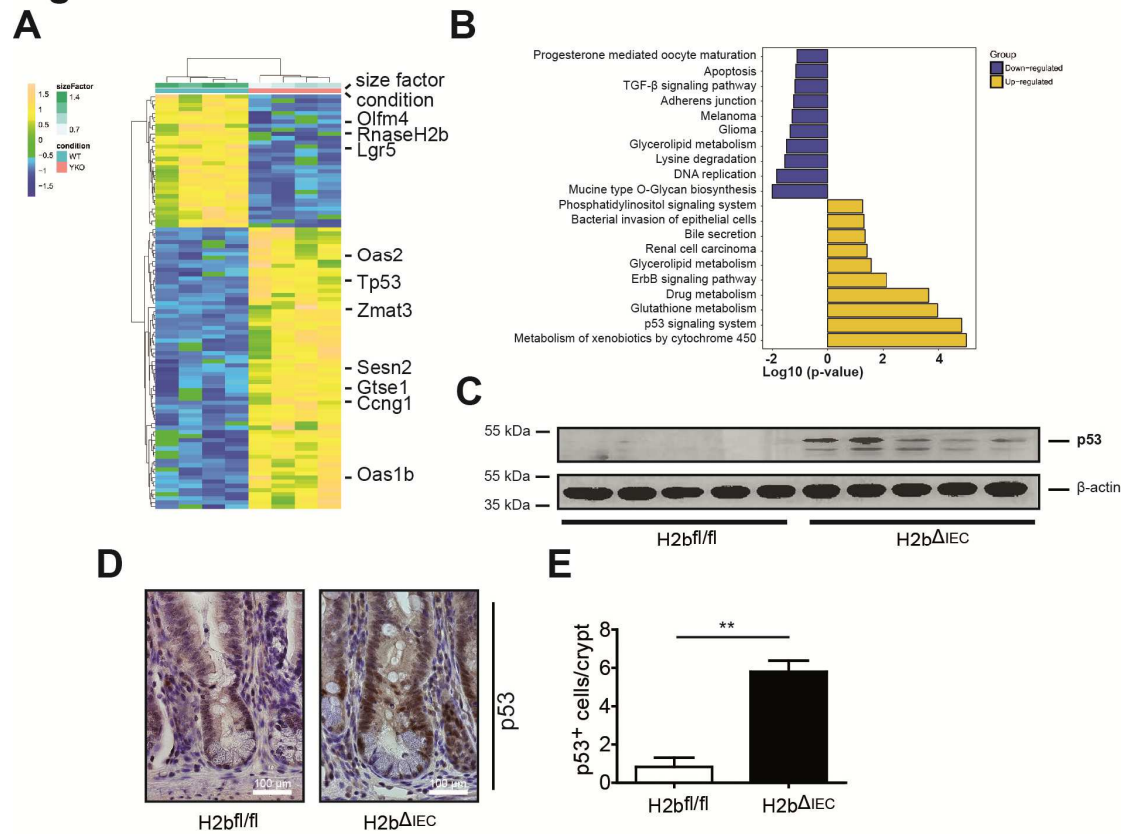
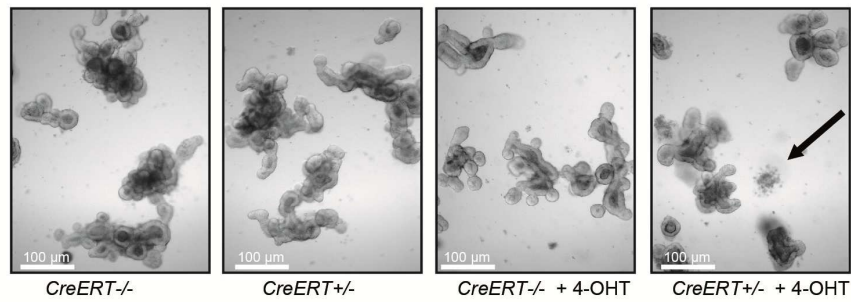
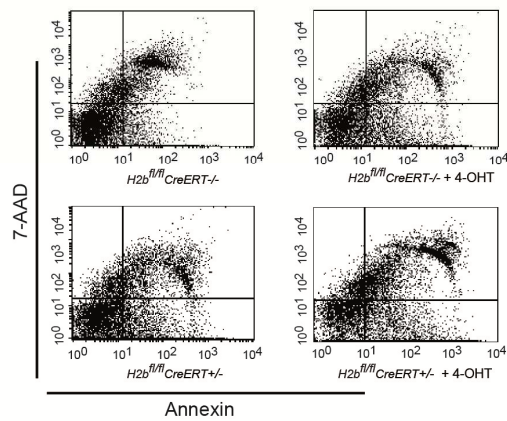


Figure S5

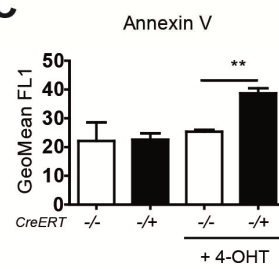
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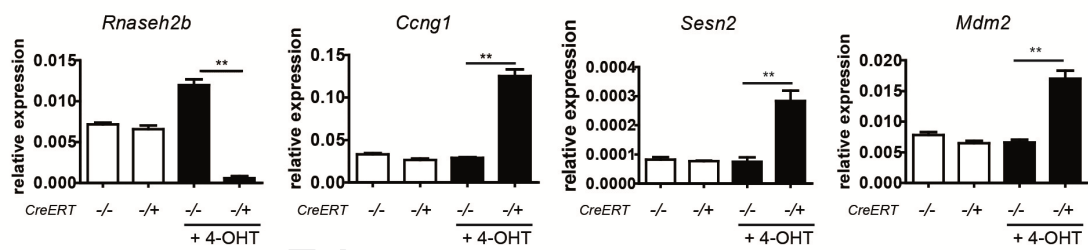
B



C



D



**Figure S6**

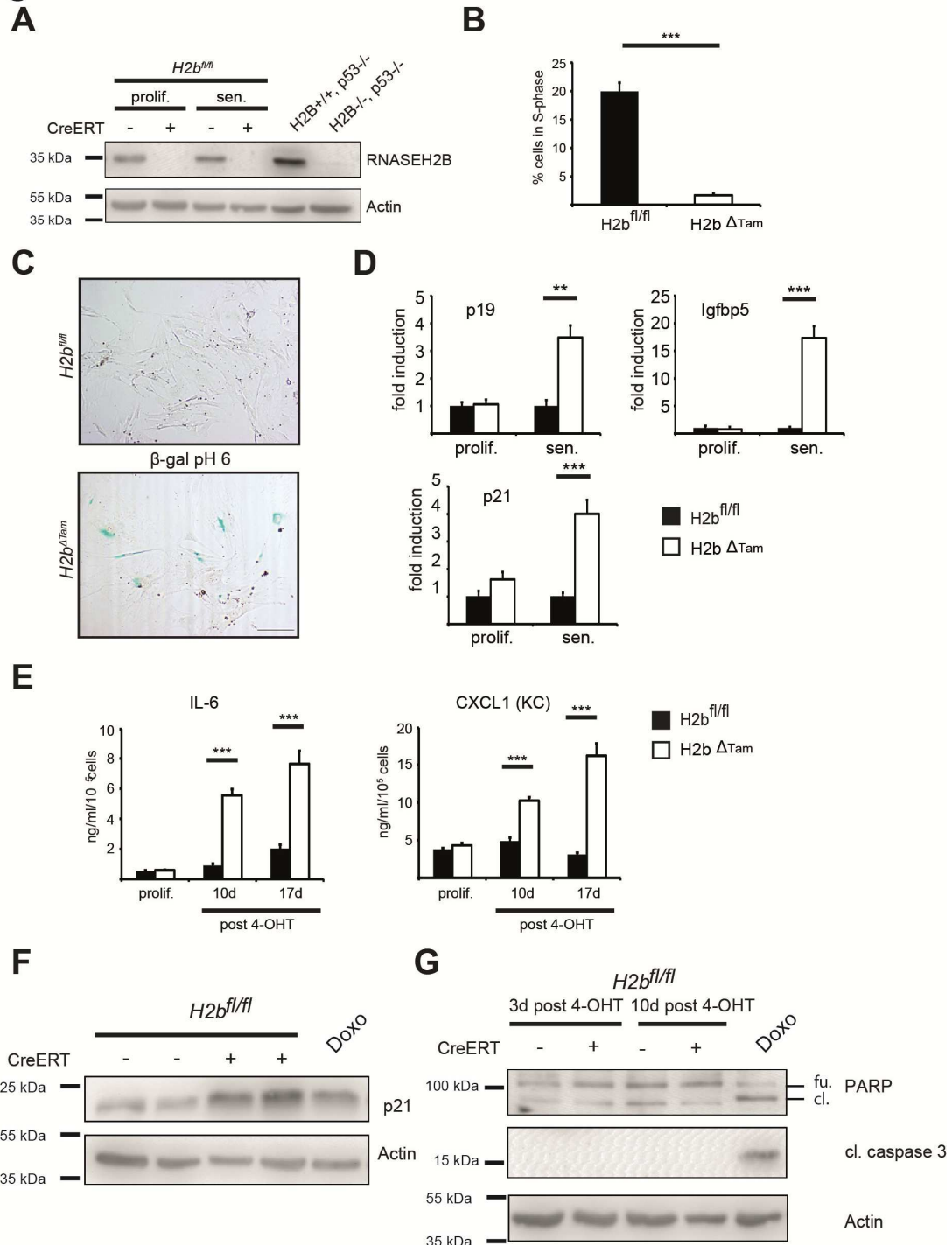
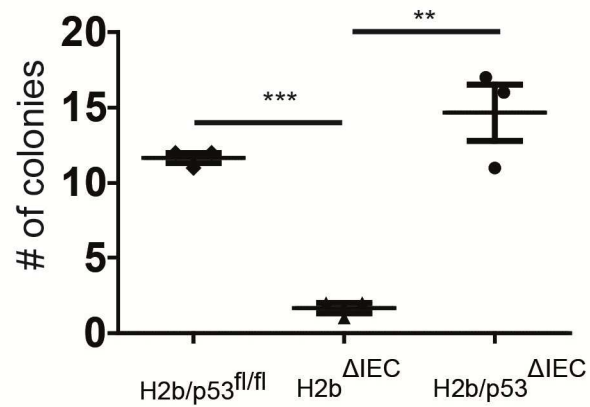
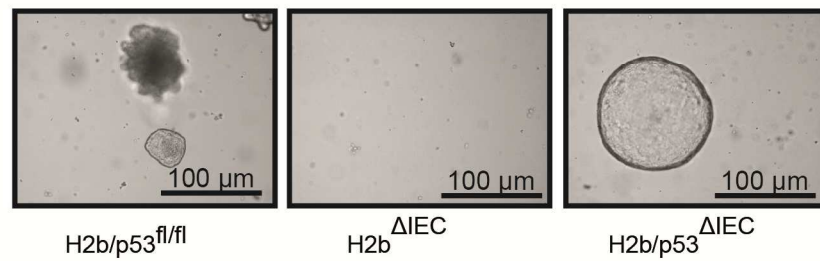


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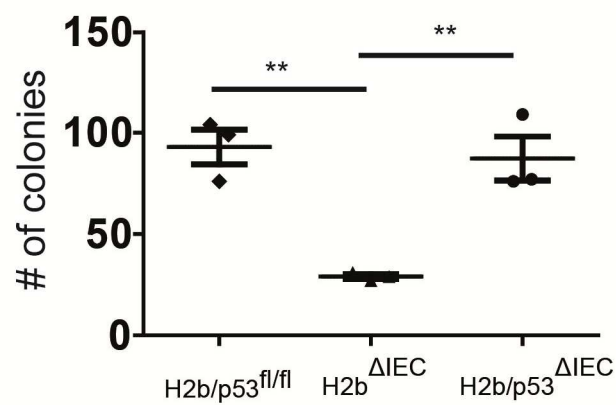
A



B



C



D

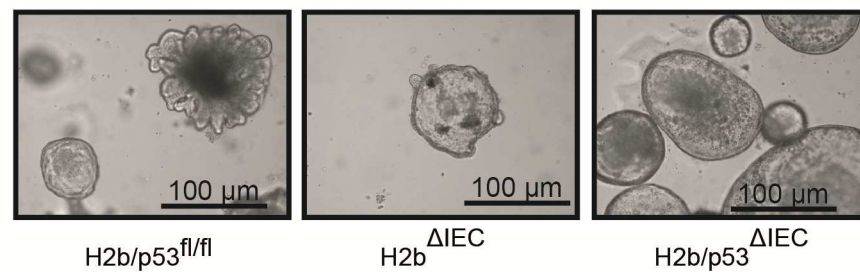


Figure S8

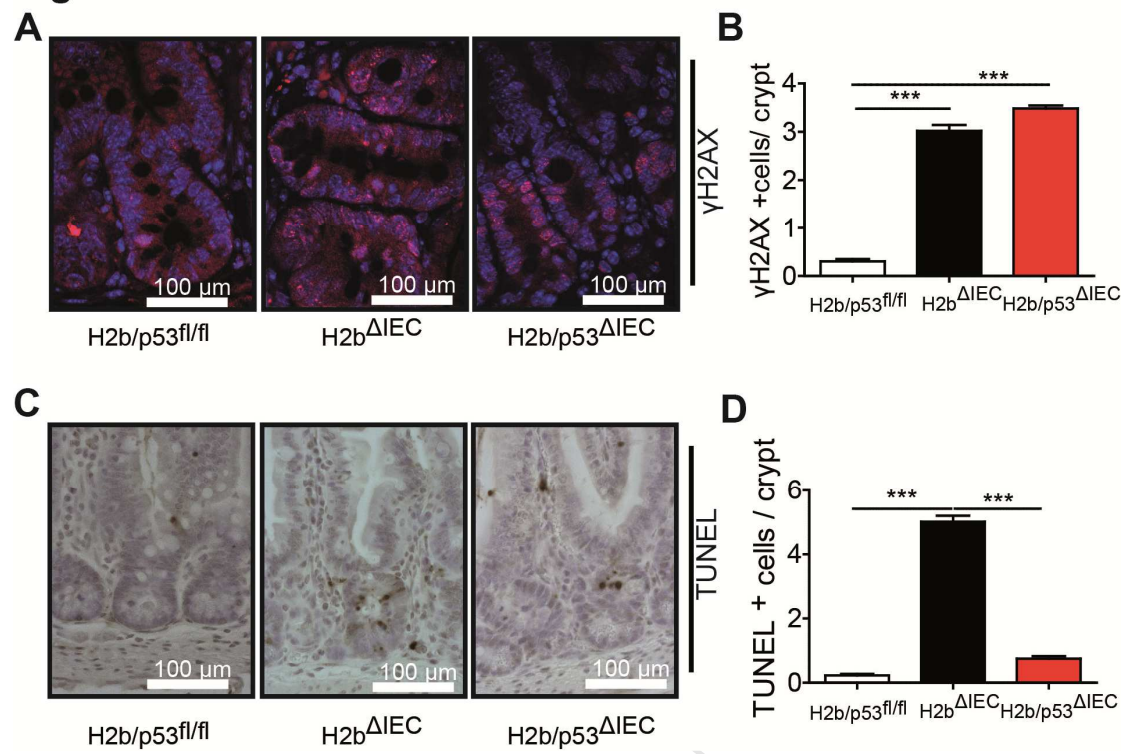
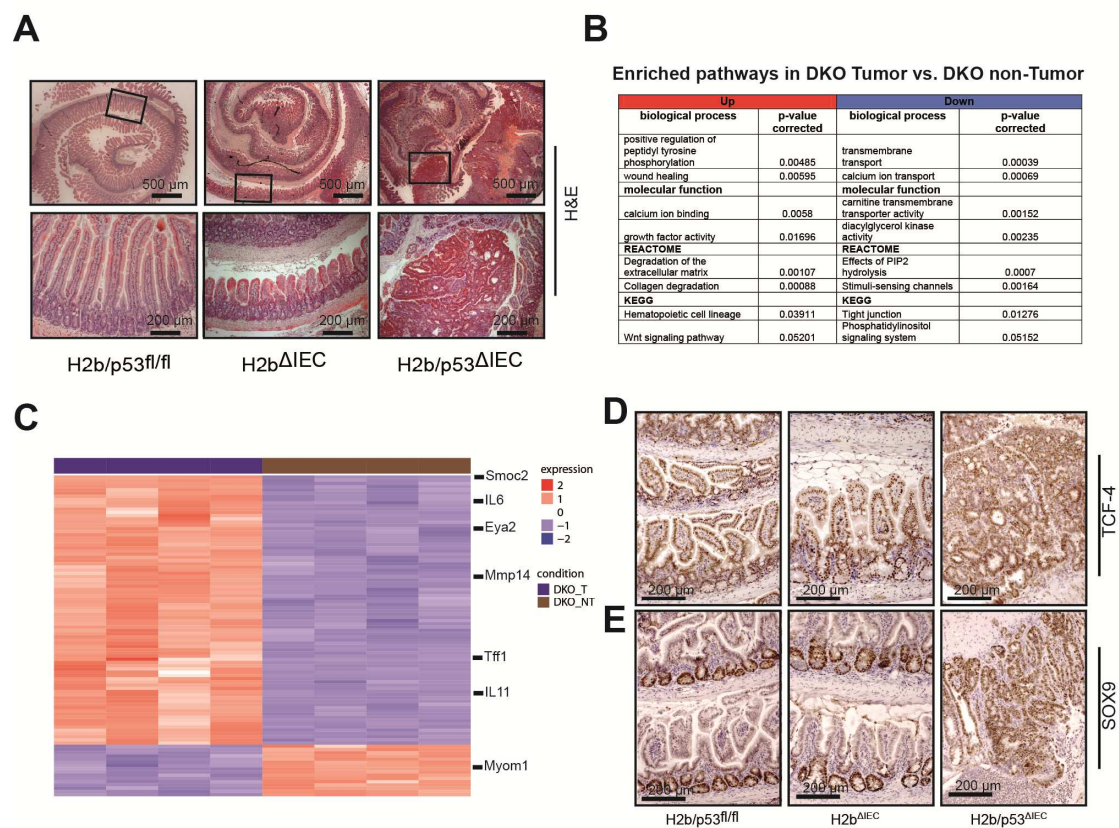
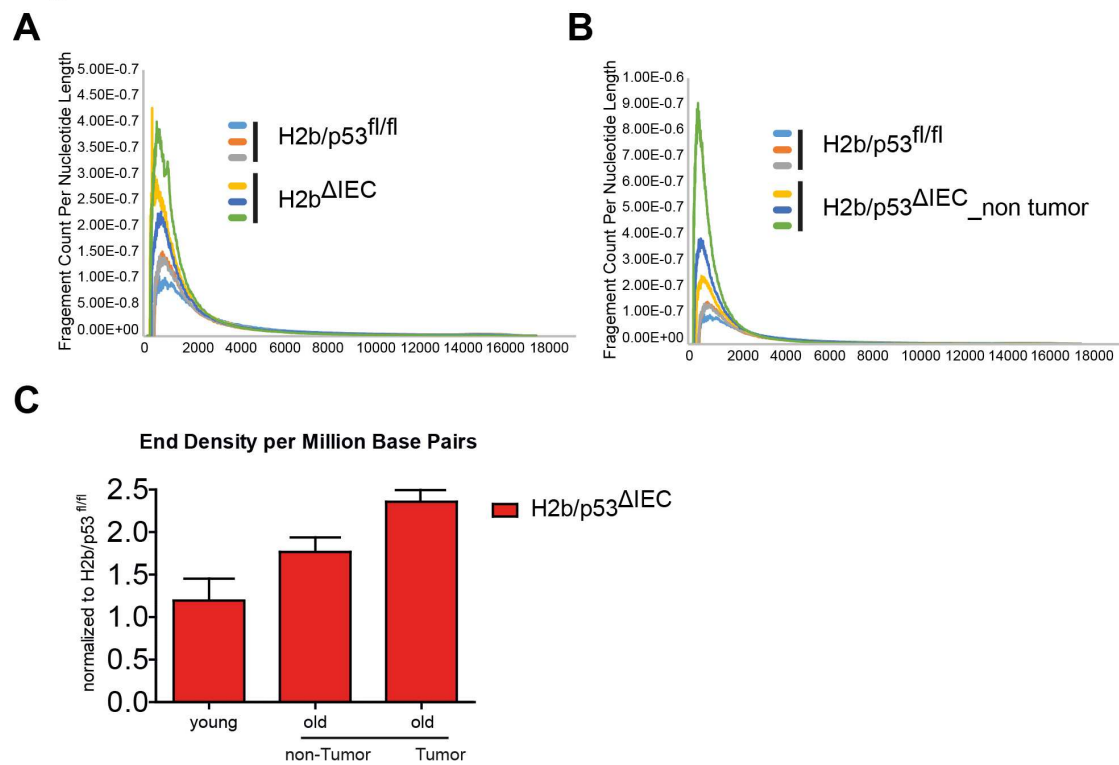


Figure S9



**Figure S10**



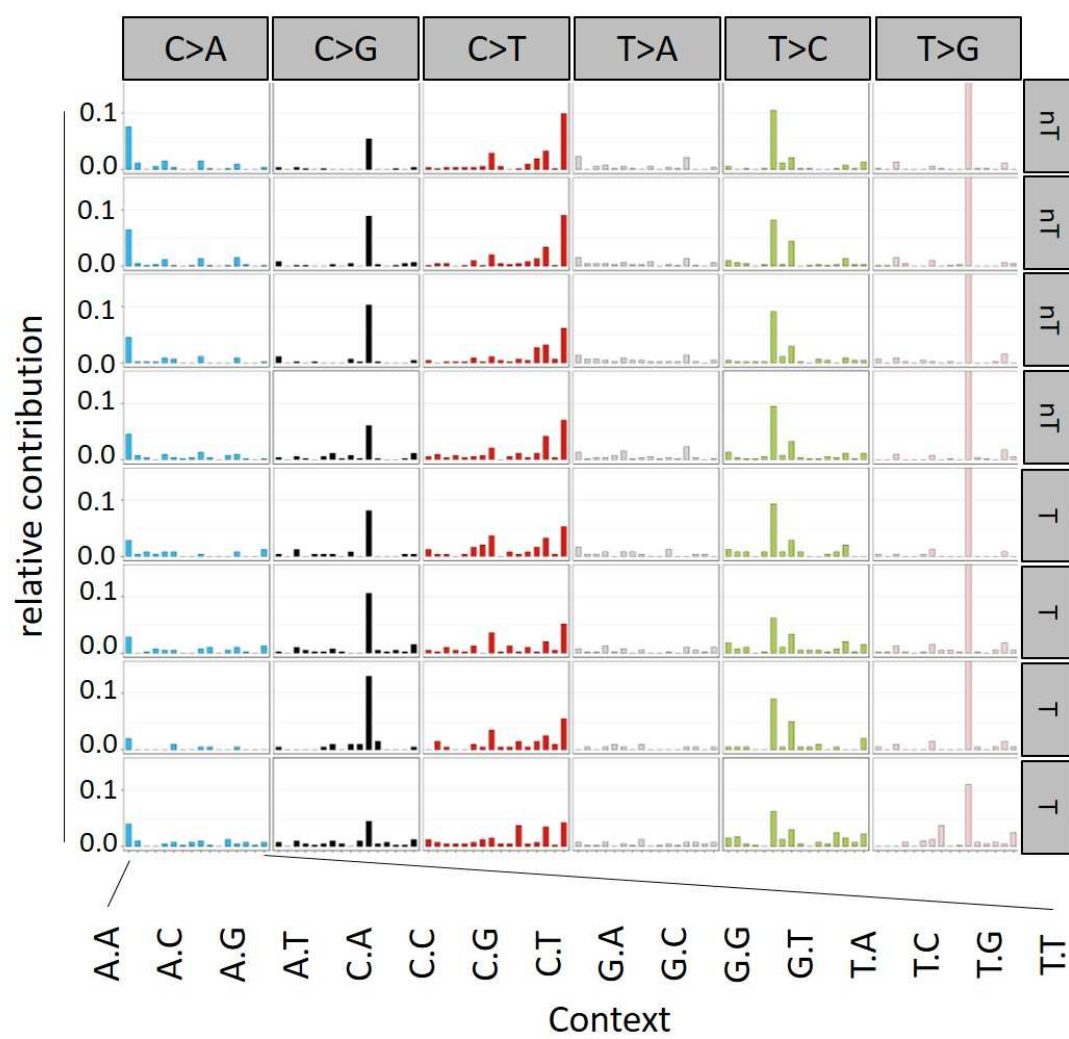
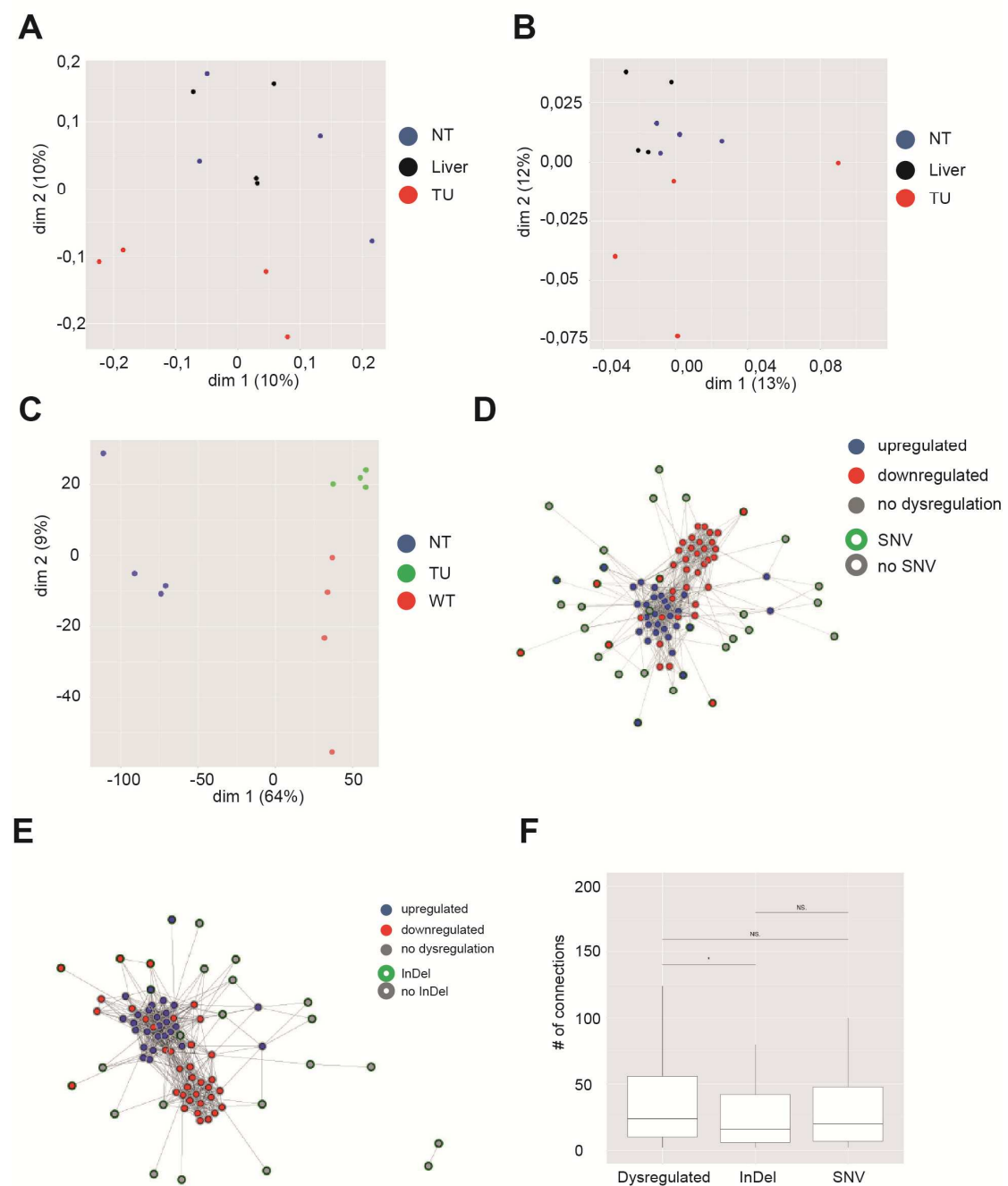
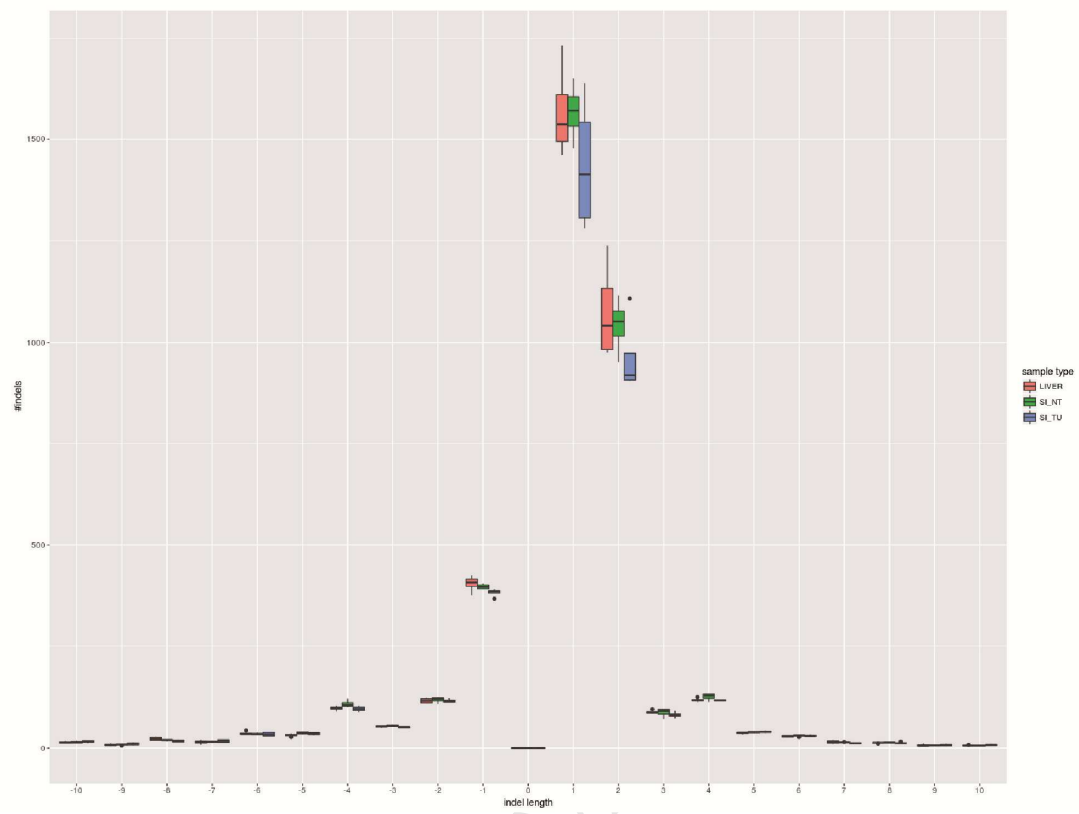




Figure S12



**Figure S13**

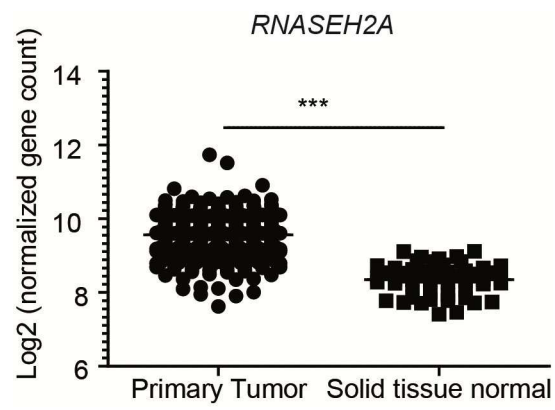


Table S1 Upregulated genes in intestinal epithelial crypts from H2bdlEC vs. H2b fl/fl

Gene_ID	GENE	baseMean	log2FoldChange	negLog10Pvalue	padj
ENSMUSG00000074968	Ano3	64.67807869	4.674028171	0.287234638	1.54688E-59
ENSMUSG00000031972	Acta1	868.1903825	2.749324382	0.201049964	1.43539E-42
ENSMUSG00000031765	Mt1	3647.15434	2.53654281	0.190524313	1.9325E-40
ENSMUSG00000025934	Gsta3	290.9540286	3.436382767	0.258527735	2.57172E-40
ENSMUSG00000015647	Lama5	1437.005538	2.11203718	0.165632913	3.06537E-37
ENSMUSG00000048458	Fam212b	53.10625461	3.127413969	0.255017262	1.42154E-34
ENSMUSG00000027210	Meis2	107.3904966	2.863695901	0.235796413	6.11483E-34
ENSMUSG00000041801	Phlda3	141.6450248	3.25024154	0.267549069	5.86373E-34
ENSMUSG00000027663	Zmat3	571.5672411	1.448585676	0.120396135	2.41746E-33
ENSMUSG00000034457	E2a2r	159.2989935	2.481040905	0.214624063	6.57561E-31
ENSMUSG000000068744	Psrc1	332.4192783	2.313175055	0.207503836	7.35427E-29
ENSMUSG00000033904	Ccp110	254.9809596	1.529004909	0.144280316	3.06183E-26
ENSMUSG00000038295	Atg9b	31.45666416	3.177733965	0.306839392	3.91651E-25
ENSMUSG000000079039	Pvt1	97.30099656	2.194240798	0.21200617	4.18961E-25
ENSMUSG00000074818	Pdzd7	55.79865047	2.467442964	0.256940845	7.75334E-22
ENSMUSG00000038776	Ephx1	769.3947926	2.204970895	0.232327534	2.29299E-21
ENSMUSG00000063672	Nkx6-3	22.03474147	3.003425785	0.324520383	2.14294E-20
ENSMUSG00000024028	Tff2	30.6440008	2.963586242	0.324371028	6.45608E-20
ENSMUSG00000001986	Gria3	21.77778236	2.722161023	0.304251532	3.65029E-19
ENSMUSG00000028898	Pik3r3	246.2232798	1.382254736	0.15582535	7.27932E-19
ENSMUSG00000026418	Tnni1	35.62791074	2.648613146	0.305108117	3.92648E-18
ENSMUSG00000038236	Hoxa7	19.6910968	2.724706935	0.319688343	1.55459E-17
ENSMUSG000000097971	Gm26917	722692.0257	1.603439994	0.190059268	8.436526191
ENSMUSG00000037936	Scarb1	221.2561702	2.173460722	0.263487497	1.59967E-16
ENSMUSG000000085912	Trp53cor1	16.67967065	2.537221405	0.313434464	5.73103E-16
ENSMUSG00000020326	Ccng1	2940.386497	1.294930868	0.162475513	1.58666E-15
ENSMUSG00000033389	Arhgap44	28.59786878	2.467723355	0.310629869	1.95359E-15
ENSMUSG00000032348	Gsta4	1392.247546	1.895916476	0.238911918	7.935629563
ENSMUSG00000015709	Arnt2	168.0381817	1.56472075	0.197310095	7.930261996
ENSMUSG00000006800	Sulf2	2244.282188	1.039759144	0.135564436	7.669851886
ENSMUSG00000025993	Slc40a1	1506.804267	2.442906927	0.318764382	1.72195E-14
ENSMUSG00000039238	Zfp750	14.14365514	2.472517063	0.323447333	1.80685E-14
ENSMUSG00000022822	Abcc5	414.5922906	1.098884114	0.14391718	7.644264802
ENSMUSG00000008167	Bfox9	586.5064601	0.921333494	0.208181468	1.72195E-14
ENSMUSG00000010651	Acaa1b	488.5549846	1.645815315	0.216922279	2.24386E-14
ENSMUSG00000004552	Ctse	46.89974183	2.432414918	0.321525405	7.625767038
ENSMUSG000000092570	2210019111Rik	158.0939514	1.756881181	0.233528314	3.27095E-14
ENSMUSG00000006356	Crip2	37.18698664	1.902612367	0.255949066	3.87167E-14
ENSMUSG00000022385	Gtse1	318.6239223	0.879597628	0.118839117	5.34499E-14
ENSMUSG000000029763	Exoc4	1294.879713	0.669574415	0.091449635	1.05714E-13
ENSMUSG000000089719	Gm15758	93.65609974	1.755158264	0.241911266	7.433558552
ENSMUSG00000037679	Inf2	261.2741314	1.626004501	0.228294729	1.3457E-13
ENSMUSG000000053461	Hnfp12	21.40353835	2.09400217	0.294363114	7.40158332
ENSMUSG00000028521	Slc35d1	926.6755539	0.950290846	0.133759618	7.321783378
ENSMUSG00000016526	Dyrk3	79.37853162	1.331695838	0.188029618	2.44697E-13
ENSMUSG00000038508	Gdf15	46.30155407	1.569946238	0.224732364	4.00535E-13
ENSMUSG00000030276	Till3	304.4580726	1.329765725	0.190781308	7.255380416
ENSMUSG00000002324	Rec8	673.1052782	1.155515441	0.165981552	7.122391776
ENSMUSG000000021190	Lgmn	552.4122632	1.03292398	0.148430323	1.0607E-12
ENSMUSG00000032690	Oas2	91.44441552	1.288040382	0.186751735	1.12997E-12
ENSMUSG00000029605	Oas1b	69.55019341	1.450598392	0.211975695	7.104467407
ENSMUSG00000029377	Ereg	133.5237939	1.610280341	0.237010779	7.082372723
ENSMUSG00000014444	Piezol	398.8694665	0.970269905	0.142859605	6.961710082
ENSMUSG00000035202	Lars2	2913.269272	1.063124588	0.156681962	6.985848465
ENSMUSG000000029166	Mapre3	211.4650417	1.213240708	0.179953537	3.16705E-12
ENSMUSG00000028435	Aqp3	366.1557867	1.229041295	0.183799007	3.36167E-12
ENSMUSG000000087317	4930466124Rik	22.63073327	1.922717969	0.287905851	1.41707E-12
ENSMUSG00000029814	Igf2bp3	20.09975356	2.070570498	0.310230778	6.785239192
ENSMUSG00000038540	Tmc3	14.46817002	2.166456889	0.325990057	6.741966462
ENSMUSG000000086665	Gm13067	14.51831986	2.12093676	0.319990544	2.27984E-11
ENSMUSG000000025402	Nab2	372.4805335	1.10644187	0.167101239	2.41751E-11
ENSMUSG000000109105	RP23-233O2.1.6	190.1840701	1.450775778	0.219069731	6.674291037
ENSMUSG00000017724	Etv4	37.89143647	1.741513002	0.259049467	6.489612874
ENSMUSG000000074179	Gm10639	861.2409651	1.659863951	0.254758982	6.645637905
ENSMUSG000000067750	Khdc1a	12.69984848	2.126783418	0.327721154	6.455637905
ENSMUSG000000024781	Lipa	1524.997068	1.128012363	0.174290091	8.60572E-11
ENSMUSG00000030609	Aen	525.7461241	0.866562842	0.134233496	6.472039543
ENSMUSG00000028893	Sesn2	263.4565931	0.854711102	0.134355592	9.66888E-11
ENSMUSG00000039450	Dcxr	551.6378029	1.030885686	0.162574951	1.07764E-10
ENSMUSG00000057933	Gsta2	62.64590234	1.850322237	0.293138711	1.99715E-10
ENSMUSG00000074183	Gsta1	5056.394101	1.555287458	0.248947598	2.28297E-10
ENSMUSG00000070686	C87414	38.4684276	1.982885585	0.320163219	2.75266E-10
ENSMUSG00000056888	Glpr1	63.05994945	1.396587908	0.226483424	4.1721E-10
ENSMUSG00000030049	Gkn2	57.91936464	1.992516821	0.323658946	5.88956E-10
ENSMUSG00000038415	Foxq1	258.4636446	1.502836673	0.244359124	6.98612E-10
ENSMUSG00000040808	S100g	1386.124716	2.001580948	0.325426795	7.45E-10
ENSMUSG00000074489	Bglap3	63.58955171	1.667328994	0.271229162	7.71741E-10
ENSMUSG00000079440	Alpi	20893.23081	1.222297909	0.199315846	7.88094E-10
ENSMUSG00000015839	Nfe2l2	4729.653451	0.588929325	0.096234528	8.65265E-10
ENSMUSG00000040706	Agmat	264.7335672	0.788467437	0.128868672	9.37341E-10
ENSMUSG00000031398	Plxna3	77.75682574	1.003088557	0.201349118	9.45317E-10
ENSMUSG00000026525	Opn3	74.1569365	1.462181097	0.239721234	0.000000001
ENSMUSG00000033039	Micall1	638.6384363	0.665357363	0.10981087	1.06397E-09
ENSMUSG00000006179	Prss16	39.75579271	1.700709002	0.28195127	1.36867E-09
ENSMUSG00000098178	Gm42418	99446.90141	1.279976043	0.212718057	1.62018E-09
ENSMUSG00000023067	Cdkn1a	1669.811316	0.714242022	0.119156201	1.77414E-09
ENSMUSG00000037860	Aim2	199.5337371	1.564084878	0.262088379	0.000000002
ENSMUSG00000102813	Gm37795	41.29797356	1.565167999	0.262295785	2.40508E-09
ENSMUSG00000102460	Gm38197	7.915527841	1.932531188	0.325314562	2.41379E-09
ENSMUSG00000034371	Tkfc	6842.966343	0.814859538	0.125919551	2.84154E-09

ENSMUSG00000037148	Arhgap10	77.800089	1.269687617	0.21499278	5.905722113	3.51105E-09	4.1286E-07
ENSMUSG00000024661	Fth1	20236.444444	0.76946536	0.130728667	5.885972638	3.58186E-09	4.15295E-07
ENSMUSG00000041936	Agri	4891.03394	0.76946536	0.130728667	5.885972638	0.000000004	4.55627E-07
ENSMUSG00000030641	Ddias	177.5085984	0.752017646	0.127865197	5.881331775	4.06978E-09	4.6243E-07
ENSMUSG00000073408	Dpcr1	20.04521234	1.908849271	0.324565829	5.881239183	4.07206E-09	4.6243E-07
ENSMUSG00000034731	Dgkh	104.2816641	1.309008631	0.222904263	5.872515015	4.29233E-09	4.83172E-07
ENSMUSG00000026981	Il1m	25.42055865	1.627214282	0.277127408	5.871719063	4.31299E-09	4.83172E-07
ENSMUSG00000040189	Ccdc114	239.6377256	1.19074354	0.202857135	5.869862752	4.36156E-09	4.85333E-07
ENSMUSG00000004187	Kifc2	213.3403053	0.907628308	0.15506226	5.85331536	4.81869E-09	5.32626E-07
ENSMUSG00000007379	Dennd2c	37.3303944	1.41750767	0.24304531	5.832277414	5.46759E-09	5.96399E-07
ENSMUSG00000040606	Kazn	339.7810447	0.840485692	0.145408189	5.780181273	7.46202E-09	8.03378E-07
ENSMUSG000000041134	Cyyr1	73.49036581	1.730228387	0.300066862	5.766142844	8.11063E-09	8.67576E-07
ENSMUSG000000043822	Adams15	978.9949825	0.979599299	0.170028932	5.761368308	8.34347E-09	8.86762E-07
ENSMUSG00000074738	B930041F14Rik	196.4470877	1.027729932	0.178861144	5.74596534	9.1398E-09	9.59101E-07
ENSMUSG00000026024	Als2	3075.10147	0.741225958	0.129666559	5.716400303	1.08804E-08	1.11359E-06
ENSMUSG000000061906	Ugt2b38	135.466297	1.872033161	0.327484803	5.716397046	1.08806E-08	1.11359E-06
ENSMUSG00000074825	Itpr1p1	336.9409152	0.787093586	0.137933131	5.706341784	1.1543E-08	1.17413E-06
ENSMUSG00000002076	Hsf2bp	10.04219753	1.852048821	0.324971111	5.69911835	0.000000012	1.2175E-06
ENSMUSG000000020307	Cdc34	795.3625662	0.611338954	0.107317792	5.696529394	1.22271E-08	1.22864E-06
ENSMUSG00000033355	Rtp4	197.8103872	0.935169197	0.165572838	5.648083405	1.62246E-08	1.62051E-06
ENSMUSG00000073406	H2-BI	563.854351	1.101010668	0.195448538	5.633250972	1.76844E-08	1.75573E-06
ENSMUSG000000041920	Slc16a6	1382.145668	1.130372965	0.201249247	5.616781082	1.94548E-08	1.88632E-06
ENSMUSG00000050908	Tvp23a	80.94836999	1.098639376	0.196181403	5.600119896	2.14204E-08	2.06482E-06
ENSMUSG00000028680	Plk3	267.3002497	1.026297453	0.18398333	5.578208934	2.43008E-08	2.31556E-06
ENSMUSG000000046818	Ddit4l	28.9181496	1.663781679	0.298652579	5.57096036	2.53339E-08	2.40021E-06
ENSMUSG00000039410	Prdm16	876.1913629	0.963033427	0.173312375	5.556633949	2.75027E-08	2.59088E-06
ENSMUSG00000030878	Cdr2	2584.631563	0.931855627	0.167931372	5.549026455	2.87265E-08	2.67576E-06
ENSMUSG000000050721	Plekho2	98.39115325	1.071468803	0.193776509	5.529730618	3.20723E-08	2.95421E-06
ENSMUSG000000022562	Oplah	350.0584534	0.660038616	0.119533385	5.521793069	3.35558E-08	3.07378E-06
ENSMUSG00000030084	Akp3	10501.85352	1.768050796	0.319655471	5.508589574	3.6172E-08	3.29523E-06
ENSMUSG00000018648	Dusp14	28.17877446	1.42763856	0.259289971	5.505953643	3.67175E-08	3.32665E-06
ENSMUSG000000061331	Gm17132	925.2279264	1.153358285	0.209841831	5.496322069	3.87794E-08	3.49436E-06
ENSMUSG000000020322	Hmg20b	1031.626678	0.595746639	0.108751736	5.478042552	0.000000043	3.83352E-06
ENSMUSG00000022074	Tnfrsf10b	220.0480077	0.801573981	0.146387067	5.475715844	4.35746E-08	3.84859E-06
ENSMUSG00000038936	Sccepdh	805.0148862	1.014921688	0.185358435	5.475454558	4.3639E-08	3.84859E-06
ENSMUSG00000030084	Plxna1	1042.123614	0.638990641	0.116004506	5.464362254	4.64574E-08	4.01361E-06
ENSMUSG00000035692	Isg15	266.2807187	1.185212215	0.216938331	5.463360066	4.67206E-08	4.01361E-06
ENSMUSG000000104988	Gm43622	150.0470047	0.979194523	0.179285015	5.461664046	4.71692E-08	4.03127E-06
ENSMUSG00000029311	Hsd17b11	3082.365921	0.621123262	0.119694103	5.440638632	5.30899E-08	0.000004491
ENSMUSG00000027907	S100a11	156.4869084	1.080715129	0.199963707	5.404556387	0.000000065	5.37076E-06
ENSMUSG00000079550	Mpp4	142.4208653	1.248847522	0.231089699	5.404167857	6.511E-08	5.37076E-06
ENSMUSG000000047810	Ccdc88b	155.6422124	1.082499372	0.200430115	5.400881863	6.63141E-08	0.000005443
ENSMUSG00000086328	2700033N17Rik	9.344480056	1.759763891	0.326058564	5.397079198	6.77345E-08	5.53221E-06
ENSMUSG00000040033	Stat2	997.1938617	0.905277633	0.167946284	5.39028083	7.03477E-08	5.71747E-06
ENSMUSG00000026003	Acadl	1737.262233	0.845439539	0.157252627	5.37622398	7.60642E-08	6.07452E-06
ENSMUSG00000005237	Dnah2	339.8042741	1.264700651	0.236661183	5.343929397	0.000000091	7.14692E-06
ENSMUSG00000003873	Bax	445.8531282	0.80567647	0.15096339	5.336899706	9.45493E-08	7.39447E-06
ENSMUSG000000066072	Cyp4a10	74.34106041	1.635492507	0.306518242	5.335710188	9.51713E-08	7.40817E-06
ENSMUSG00000028849	Map7d1	346.6003718	0.72469565	0.135858575	5.334191458	0.000000096	7.43553E-06
ENSMUSG00000012123	Aim11	2005.831958	0.636925321	0.119788578	5.317078884	1.05446E-07	0.000008094
ENSMUSG00000029406	Pitpnm2	198.4188	0.752525962	0.136523401	5.312297785	1.08252E-07	8.2656E-06
ENSMUSG00000051483	Cbr1	3205.071789	0.906813652	0.170822654	5.308509341	1.10525E-07	8.36763E-06
ENSMUSG00000004567	Mcoln1	577.5334403	0.625717062	0.118103307	5.298048626	0.000000117	8.82107E-06
ENSMUSG00000026825	Dnm1	2084.815857	0.803794259	0.15187124	5.292603514	1.20587E-07	9.04677E-06
ENSMUSG00000105285	Gm43238	302.0569098	1.202753075	0.227351916	5.290270231	1.22136E-07	9.12167E-06
ENSMUSG00000022564	Grina	1738.421662	0.658415517	0.124919818	5.270705075	1.35901E-07	1.00591E-05
ENSMUSG00000039474	Wfs1	407.038579	0.787075614	0.149379546	5.268965094	1.37195E-07	1.00679E-05
ENSMUSG00000025733	Rhot2	940.7468735	0.524379993	0.099722253	5.258404986	1.4531E-07	1.03847E-05
ENSMUSG00000073002	Vamp5	88.79451116	0.992820514	0.188803536	5.258484745	1.45247E-07	1.03847E-05
ENSMUSG00000041827	Oasl1	1156.426444	0.806292388	0.153706289	5.245669486	1.55716E-07	1.09397E-05
ENSMUSG00000023019	Gpd1	10250.95614	0.851595184	0.162874107	5.228548613	1.70846E-07	0.000011852
ENSMUSG000000006345	Ggt1	11481.06239	0.785193848	0.150299994	5.22417752	1.74931E-07	1.20848E-05
ENSMUSG000000031382	Asb11	10.61321015	1.693813617	0.324542154	5.219086627	1.79808E-07	1.23702E-05
ENSMUSG00000023030	Slc11a2	1284.034995	0.852362458	0.163514391	5.212767218	0.000000186	1.27463E-05
ENSMUSG000000103322	Gm37404	74.82398372	1.219126373	0.235017696	5.187381184	2.13272E-07	1.44328E-05
ENSMUSG000000109293	Dcst2	22.59989231	1.471064412	0.283712909	5.185045756	0.000000216	1.45555E-05
ENSMUSG00000003812	Dnase2a	100.9453429	0.969658118	0.187071848	5.183346025	2.1794E-07	1.46293E-05
ENSMUSG00000023249	Parp3	506.9478461	0.668187368	0.129328849	5.166576314	2.38421E-07	1.57491E-05
ENSMUSG00000031781	Ciapiin1	531.0549067	0.681632848	0.13200414	5.163723266	2.42086E-07	1.59277E-05
ENSMUSG00000020258	Glyctk	400.8211616	0.814629005	0.158933125	5.125608684	2.96578E-07	1.93593E-05
ENSMUSG00000036246	Gmip	680.7615262	0.676908175	0.132234675	5.118991492	3.07174E-07	1.98943E-05
ENSMUSG00000037098	Rab11fip3	1622.259992	0.604217867	0.118159616	5.11357338	3.16121E-07	2.03739E-05
ENSMUSG00000053388	Trim50	11.42567404	1.668370332	0.326297979	5.113026859	0.000000317	2.03739E-05
ENSMUSG00000037326	Capn15	699.1955222	0.622371277	0.121954441	5.103309664	3.33764E-07	2.12023E-05
ENSMUSG00000030472	Ceacam18	1356.445012	0.84089435	0.165125365	5.092460207	3.53447E-07	2.22819E-05
ENSMUSG00000029201	Ugdh	5912.303588	0.853884308	0.168043019	5.081343532	3.74775E-07	2.34226E-05
ENSMUSG00000054146	Krt15	18.04414873	1.491511363	0.293556329	5.080835321	3.75779E-07	2.34226E-05
ENSMUSG00000025277	Abhd6	995.3980812	0.699329479	0.137757321	5.076532243	3.84386E-07	2.38693E-05
ENSMUSG00000057666	Gapdh	8378.605081	0.718209233	0.141536132	5.074387888	3.88745E-07	2.39606E-05
ENSMUSG00000066861	Oas1g	249.0165088	1.074291658	0.212537603	5.054595717	4.31303E-07	2.62905E-05
ENSMUSG00000022780	Mfi2	8.255221302	1.604182649	0.317628888	5.050493548	4.4067E-07	0.000026763
ENSMUSG00000032440	Tgfbir2	609.9994788	0.794121927	0.157352665	5.046765017	4.49353E-07	2.71908E-05
ENSMUSG000000064356	mt-Atip8	8901.975117	1.157055162	0.229347169	5.044994302	4.53535E-07	0.000027344
ENSMUSG00000036377	C530008M17Rik	2990.82829	0.715739604	0.141891332	5.044279978	4.55232E-07	2.73469E-05
ENSMUSG00000032289	Thsd4	29.60195758	1.41116323	0.280197046	5.03632444	4.74556E-07	2.83787E-05
ENSMUSG00000074628	Tlhc2	131.5050752	0.837863701	0.167676025	4.996920114	5.82532E-07	0.000033889
ENSMUSG00000057346	Apol9a	602.9507193	0.962505226	0.192963703	4.988011797	0.000000061	3.51221E-05
ENSMUSG00000032777	Gtf3c1	3151.514551	0.485279794	0.097396036	4.982541515	6.27545E-07	3.60024E-05
ENSMUSG00000072683	Gm7457	14.51371146	1.598959027	0.320449184	4.961345217	7.00066E-07	4.00245E-05
ENSMUSG00000085651	Gm11695	131.2165998	0.84008153	0.169504282	4.956108028	7.19192E-07	4.09767E-05
ENSMUSG00000073758	Sh3d21	258.7331038	0.677259086	0.136779023	4.951483578	7.36498E-07	4.15345E-05
ENSMUSG00000028613	Lrp8	67.98769212	1.090108984	0.20436681	4.951964297	7.34681E-07	4.15345E-05

ENSMUSG00000046753	Ccdc66	206.4657238	0.728594025	0.14744663	4.941408457	7.75602E-07	4.35915E-05
ENSMUSG00000043079	Synpo	2698.13399	1.235076307	0.250481715	4.930804262	8.05066E-07	4.50946E-05
ENSMUSG00000002228	Ppm1j	467.3074263	0.695227293	0.141047974	4.92901297	8.18918E-07	4.55626E-05
ENSMUSG000000029098	Acox3	1377.309047	0.966091065	0.19603641	4.928120584	8.26461E-07	4.58285E-05
ENSMUSG00000004035	Gstm7	254.1230815	0.682521818	0.138638914	4.91592594	8.30244E-07	4.58848E-05
ENSMUSG000000038167	Plekhhg6	1464.220953	0.110104179	0.223984323	4.915987708	8.83638E-07	4.81932E-05
ENSMUSG000000018920	Cxcl16	356.4826679	0.681166816	0.138652604	4.912758908	8.83539E-07	4.81932E-05
ENSMUSG000000034854	Mfsd12	333.304787	0.795471939	0.161918343	4.912796942	0.000000898	4.84998E-05
ENSMUSG000000029822	Osbpl3	1759.669613	0.1579404172	0.321839009	4.90743548	8.97863E-07	4.84998E-05
ENSMUSG000000048191	Muc6	19.96401276	0.689671819	0.141245893	4.882774324	9.2275E-07	4.63298E-05
ENSMUSG000000033618	Map3k13	1318.607675	1.38751343	0.2843452	4.879679457	0.000001046	5.55874E-05
ENSMUSG00000103067	Gm30414	18.60862221	1.019851346	0.209407704	4.8701711	1.06258E-06	5.61071E-05
ENSMUSG000000056234	Ncoa4	1378.774868	0.951567234	0.195524023	4.866753567	0.000001115	5.79529E-05
ENSMUSG00000103593	Gm37352	154.4708056	0.761455877	0.156579566	4.863060332	1.13446E-06	5.85963E-05
ENSMUSG000000066595	Mfsd7b	2071.063412	0.754786035	0.155316375	4.85966812	1.15585E-06	5.95153E-05
ENSMUSG000000018476	Kdm6b	1496.56702	0.687917145	0.14194176	4.846474691	1.17583E-06	6.02517E-05
ENSMUSG000000026305	Lrrfip1	1957.168588	0.730127605	0.150710427	4.84457261	1.25675E-06	6.39121E-05
ENSMUSG000000021185	9030617O03Rik	2206.972075	1.562142738	0.322960209	4.836951107	1.26885E-06	6.41386E-05
ENSMUSG000000085620	G630018N14Rik	6.369707411	0.690933671	0.142933439	4.833954014	1.31846E-06	6.92522E-05
ENSMUSG000000074063	Osgin1	521.2406473	1.271417475	0.263119011	4.832100397	1.33848E-06	6.68431E-05
ENSMUSG000000038732	Mboat1	249.9133552	0.748027309	0.154912927	4.828695212	0.000001351	6.72661E-05
ENSMUSG000000006711	D130043K22Rik	632.8813236	1.422974277	0.294812173	4.826714797	1.37431E-06	6.80179E-05
ENSMUSG000000037583	Nr0b2	22.38321221	1.556179164	0.323466559	4.810942959	0.000001388	0.000068493
ENSMUSG000000051225	Fam83a	7.635695872	1.570173924	0.326802467	4.804657499	1.5022E-06	7.30395E-05
ENSMUSG000000064442	Gm26225	11.07950102	0.904409326	0.188680232	4.793344372	1.55017E-06	7.51513E-05
ENSMUSG000000024866	Acy3	766.2601734	0.994990021	0.207661968	4.791392613	1.64024E-06	7.88265E-05
ENSMUSG000000088789	Scarna13	1368.996629	0.8737621	0.175150064	4.78311044	1.65628E-06	7.91385E-05
ENSMUSG000000054598	9130230L23Rik	461.8946205	1.104366966	0.232308051	4.778326134	1.68693E-06	8.01411E-05
ENSMUSG000000000444	Pparg	275.3997891	1.45560562	0.304778606	4.775944217	1.78866E-06	8.17646E-05
ENSMUSG000000054612	Mgmt	54.91298376	1.080359524	0.226246187	4.775150201	0.000001726	8.34954E-05
ENSMUSG000000030228	Plk3c2g	18.41446717	0.87517812	0.184065877	4.754700507	1.76761E-06	8.41052E-05
ENSMUSG000000052353	Cemip	99.87624713	0.772080057	0.162012671	4.765553542	1.84362E-06	8.61047E-05
ENSMUSG000000022037	Clu	69.3749308	0.754786035	0.155316375	4.769851518	1.88336E-06	8.77137E-05
ENSMUSG000000018474	Chd3	4563.104382	0.87517812	0.184065877	4.754700507	1.98741E-06	9.20425E-05
ENSMUSG000000044033	Ccdc141	87.65130377	0.772080057	0.162012671	4.765553542	1.98741E-06	9.20425E-05
ENSMUSG000000038143	Stox2	107.6210381	0.87517812	0.184065877	4.754700507	1.98741E-06	9.20425E-05
ENSMUSG000000089662	Gm14057	13.47934585	0.772080057	0.162012671	4.765553542	1.98741E-06	9.20425E-05
ENSMUSG000000032198	Dock6	724.0554	0.87517812	0.184065877	4.754700507	1.98741E-06	9.20425E-05
ENSMUSG000000022947	Cbr3	47.58688636	1.549715718	0.326682312	4.743800506	0.000002038	9.33444E-05
ENSMUSG00000005677	Nr1i3	1264.803341	0.855652947	0.180613046	4.737492476	2.09745E-06	9.55379E-05
ENSMUSG000000086813	Gm13657	99.95691571	0.855652947	0.180613046	4.737492476	2.16379E-06	9.80208E-05
ENSMUSG000000020802	Ube2o	351.1647698	1.04159203	0.219855357	4.737624069	2.16328E-06	9.80208E-05
ENSMUSG000000031861	Lpar2	79.53732671	0.565469457	0.119389299	4.736349587	0.000002176	9.83063E-05
ENSMUSG000000031860	Pbx4	43.55148508	0.902647038	0.190631122	4.735045508	2.19006E-06	9.86717E-05
ENSMUSG000000028760	Eif4g3	1190.078044	1.113465124	0.235936474	4.719342898	2.36608E-06	0.000104892
ENSMUSG00000009292	Trpm2	76.27936973	0.630649001	0.134037033	4.705036204	2.53821E-06	0.000110746
ENSMUSG000000056529	Ptfr	88.32766488	1.04873218	0.223566198	4.690924611	2.71973E-06	0.00011652
ENSMUSG000000096463	Gm21750	89.35115487	1.323160681	0.282507256	4.683634328	2.81833E-06	0.000120433
ENSMUSG000000031938	4931406C07Rik	2643.485597	1.029490293	0.219891638	4.68180737	2.84357E-06	0.000121199
ENSMUSG000000039745	Htatip2	556.5582519	0.805628894	0.172165865	4.679376457	2.87749E-06	0.00012233
ENSMUSG000000020235	Fzr1	968.4506918	0.710936529	0.152028533	4.676336192	2.92046E-06	0.000123839
ENSMUSG000000064351	mt-Co1	276105.6671	0.366068762	0.078313334	4.67441166	0.000002948	0.000124687
ENSMUSG000000026858	Fam73b	1770.00964	1.0161777	0.217523336	4.671580155	2.98891E-06	0.000126097
ENSMUSG000000025498	Irf7	1516.403858	0.516478	0.110664484	4.667061948	3.05537E-06	0.000127839
ENSMUSG000000033987	Dnah17	87.04485741	0.648209802	0.13905501	4.661697653	3.13612E-06	0.000130645
ENSMUSG000000022791	Tnk2	707.3680249	1.1489379	0.246741555	4.656442651	3.2172E-06	0.000133687
ENSMUSG000000041440	Gk5	623.7652492	0.60020277	0.129092419	4.649403695	0.000003329	0.000137985
ENSMUSG000000046807	Lrrc75b	47.41985628	0.722882065	0.155671389	4.643641124	3.42322E-06	0.000141187
ENSMUSG000000041237	Plkr	4938.288535	1.065852355	0.22958892	4.642438136	3.44322E-06	0.000141659
ENSMUSG000000073771	Btdb19	68.49778389	0.683120851	0.147280934	4.63821644	3.51429E-06	0.000143869
ENSMUSG000000087132	A930001C03Rik	46.7685965	0.941707137	0.203139892	4.635756797	3.55634E-06	0.000145232
ENSMUSG00000102443	Gm37102	59.15462582	1.08682384	0.234839062	4.627951712	0.000003693	0.000150442
ENSMUSG000000097709	2810429I04Rik	33.24612655	1.143137369	0.247188667	4.624554121	3.75405E-06	0.000152554
ENSMUSG000000020508	Unc119	58.70588083	1.168081029	0.252887839	4.618968756	3.85652E-06	0.000156335
ENSMUSG000000025507	Pidd1	280.8910438	0.912472127	0.197625609	4.61717554	0.00000389	0.000157307
ENSMUSG000000030643	Rab30	588.6978075	0.786666407	0.170609296	4.610923474	4.00884E-06	0.000161719
ENSMUSG000000054702	Apr1s3	344.4473745	0.893807003	0.194167575	4.60327634	0.000004159	0.000167368
ENSMUSG000000052488	Cherp	622.5156109	0.855446347	0.185936711	4.600739374	4.20994E-06	0.000169009
ENSMUSG000000038011	Dnah10	38.81872705	0.504010049	0.109590953	4.599011464	0.000004245	0.000170005
ENSMUSG000000001270	Ckb	5345.592537	1.422030181	0.309242813	4.598425968	4.25695E-06	0.000170073
ENSMUSG000000038146	Notch3	15.02612923	1.083847438	0.235970294	4.593152041	0.000004366	0.00017361
ENSMUSG000000030921	Trim30a	296.0639796	1.472955291	0.320686508	4.593131465	4.36644E-06	0.00017361
ENSMUSG000000090171	Ugt1a2	55.33732629	0.922027603	0.20086707	4.590237726	4.42741E-06	0.000175195
ENSMUSG000000020184	Mdm2	1556.245602	1.075165763	0.23422826	4.590247842	4.4272E-06	0.000175195
ENSMUSG000000076435	Acsf2	1192.711456	0.652828681	0.142385697	4.584931594	4.54135E-06	0.000179275
ENSMUSG000000061825	Ces2c	3787.624812	0.837407757	0.183310195	4.568255239	0.000004918	0.00019186
ENSMUSG000000064368	mt-Nd6	788.472963	0.654591005	0.143324543	4.567194098	0.000004943	0.000192381
ENSMUSG000000065653	Gm23105	119.0288674	0.904059687	0.198670614	4.550545597	5.3507E-06	0.000206794
ENSMUSG000000074259	Gramd2	208.998008	1.329783703	0.292374224	4.548224821	0.00000541	0.000208117
ENSMUSG000000029060	Mib2	810.9880176	0.901813379	0.198355791	4.5464434	0.000005456	0.000209399
ENSMUSG000000064341	mt-Nd1	50369.89009	0.501417007	0.110528633	4.536534971	5.7186E-06	0.000216895
ENSMUSG000000025650	Col7a1	94.05789171	0.919489088	0.202703772	4.536122238	5.7298E-06	0.000216895
ENSMUSG000000098053	Gm27033	8.703430529	1.014709902	0.223746877	4.535079618	5.75818E-06	0.000217473
ENSMUSG000000085981	Gm11375	6.101029799	1.46171021	0.322348314	4.534567576	5.77216E-06	0.000217506
ENSMUSG000000091680	Klhd7b	42.92078344	1.410793695	0.311414745	4.530272627	5.89076E-06	0.000220297
ENSMUSG000000028378	Ptgr1	2465.576477	1.222842618	0.270058899	4.528058971	5.9528E-06	0.000222793
ENSMUSG000000034853	Acot11	2138.308274	0.767575819	0.169819824	4.519942376	6.18565E-06	0.000228414
ENSMUSG000000075706	Gpx4	5764.939729	0.643577109	0.142646779	4.511683432	6.43151E-06	0.000235686
ENSMUSG000000025429	Pstpip2	442.6207046	0.866638215	0.192253444	4.507790336	6.55063E-06	0.000238702
ENSMUSG000000031153	Gripap1	759.6521571	0.67165124	0.150229841	4.50091376	6.7662E-06	0.000244942
ENSMUSG000000021733	Slc4a7	5841.456124	0.559620041	0.12444576	4.496899201	6.89517E-06	0.000249067
ENSMUSG000000039457	Ppl	396.5232045	1.393601405	0.310528481	4.487837638	0.000007195	0.000259332
			0.687356005	0.3261446	4.484859184	7.29621E-06	0.000261272



ENSMUSG00000020131	Pcsk4	148.2635374	0.985605353	0.219948958	4.481104717	7.42577E-06	0.000264204
ENSMUSG00000003573	Homer3	43.816551	0.000000000	0.000000000	8.09877E-06	0.000286363	
ENSMUSG000000042472	Zfp410	745.5737933	0.471466116	0.10567288	4.461562091	8.13644E-06	0.000287026
ENSMUSG000000100768	Gm29055	328.8151312	1.005154453	0.22629234	4.441840385	8.91927E-06	0.000311986
ENSMUSG000000035713	Usp35	183.5623715	0.93003268	0.209424875	4.440889266	8.95879E-06	0.000312709
ENSMUSG000000035069	Oma1	415.7863316	0.576536395	0.129893495	4.438531706	9.05746E-06	0.000314828
ENSMUSG000000031958	Ldhd	96.9184899	0.842774916	0.189870593	4.438680601	9.0512E-06	0.000314828
ENSMUSG000000105501	5330426L24Rik	58.59718029	1.117534882	0.252095649	4.432979646	0.000009294	0.000321699
ENSMUSG000000031635	Anxa10	12.26405057	1.397925158	0.31554881	4.43013921	9.41723E-06	0.000324611
ENSMUSG000000034792	Gna15	12.67028077	1.431880338	0.323272324	4.429331651	9.45256E-06	0.000325121
ENSMUSG000000035540	Gc	7.076883172	1.368272721	0.309091	4.426763349	9.56576E-06	0.000327011
ENSMUSG000000091586	Cyp4f17	31.51222959	1.085411486	0.245298283	4.424863781	9.65032E-06	0.000328766
ENSMUSG000000017167	Cntnap1	141.4957206	1.095654043	0.247621098	4.424720076	9.65674E-06	0.000328766
ENSMUSG000000032661	Oas3	1060.652766	0.828691133	0.187453346	4.420786028	9.83425E-06	0.000332759
ENSMUSG000000106819	Gm43498	132.1310155	0.981708799	0.222194716	4.418236477	0.000009951	0.000333987
ENSMUSG000000050860	Phospho1	195.8631762	1.010236044	0.228610624	4.419024921	9.91472E-06	0.000333987
ENSMUSG000000019873	Reep3	2888.982361	0.476053552	0.107812695	4.415561187	1.00748E-05	0.000336098
ENSMUSG000000022768	Ccdc116	270.8922123	0.707846049	0.16029913	4.41578222	1.00645E-05	0.000336098
ENSMUSG000000061313	Ddhd2	2234.97531	0.586608486	0.133088765	4.407648446	1.04499E-05	0.000346707
ENSMUSG000000059895	Ptp4a3	133.5318193	0.816391453	0.185219447	4.407698362	1.04475E-05	0.000346707
ENSMUSG000000021280	Exoc3l4	4547.707119	0.884327186	0.200659767	4.407097643	1.04765E-05	0.000346707
ENSMUSG000000075122	Cd80	7.530688339	0.326487204	0.107812695	4.407330743	1.04652E-05	0.000346707
ENSMUSG000000026944	Abca2	811.9551887	0.837166803	0.190022067	4.405629388	1.05477E-05	0.000348369
ENSMUSG000000018339	Gpx3	43.19180157	1.027621714	0.233369841	4.403404089	1.06565E-05	0.000351263
ENSMUSG000000071506	Tmem139	392.5094458	0.487715637	0.110818812	4.401018469	1.07744E-05	0.000354443
ENSMUSG000000074622	Ma1b	1194.358682	0.76244315	0.173465269	4.395364862	1.10587E-05	0.000360931
ENSMUSG000000030309	Caprin2	229.8638352	0.945501929	0.215219604	4.393196132	1.11696E-05	0.000363122
ENSMUSG000000028088	Fmo5	4069.936639	0.766463928	0.174520235	4.391834142	1.12398E-05	0.00036469
ENSMUSG000000074896	Ifit3	115.1538905	0.840858305	0.191808421	4.383844558	1.16603E-05	0.000376857
ENSMUSG000000021609	Slc6a3	53.27735366	1.203267685	0.297681151	4.374706561	1.21596E-05	0.000391468
ENSMUSG000000032583	Mon1a	956.8329676	0.502544589	0.114990845	4.370300879	1.24075E-05	0.000398677
ENSMUSG000000049580	Tsku	948.993194	0.822262401	0.188205895	4.368960932	1.24839E-05	0.000400354
ENSMUSG000000051510	Matrg	948.9573729	0.479538743	0.109828705	4.366242313	1.26402E-05	0.000403805
ENSMUSG000000032122	Slc37a2	272.3825053	1.417513439	0.324804719	4.364202109	1.27588E-05	0.000406808
ENSMUSG000000037552	Plekhhg2	580.7177043	0.611007433	0.140450437	4.350341987	1.35925E-05	0.000430907
ENSMUSG000000022847	Thpo	25.70463241	1.280341956	0.294533662	4.34701402	1.38003E-05	0.00043666
ENSMUSG000000022445	Cyp2d26	4947.320873	0.798438114	0.183791735	4.344254731	1.39749E-05	0.000441342
ENSMUSG000000068246	Apol9b	351.5032015	0.800389865	0.184283033	4.343264013	1.40381E-05	0.000442495
ENSMUSG000000000631	Myo18a	6816.347967	0.539233518	0.124383683	4.335243217	1.45599E-05	0.000454554
ENSMUSG000000025504	Eps8l2	6820.986999	0.575731013	0.132791639	4.335596857	1.45365E-05	0.000454554
ENSMUSG000000027955	Fam198b	61.70609698	1.32737642	0.306209668	4.334861235	1.45852E-05	0.000454554
ENSMUSG000000042567	Nek10	22.43764776	1.42081977	0.327657382	4.336297142	1.44903E-05	0.000454554
ENSMUSG000000032294	Pkm	17198.4389	0.612298963	0.141300987	4.333295729	1.46894E-05	0.000456941
ENSMUSG000000087431	Gm16054	19.90347206	1.397476665	0.322637398	4.331415613	1.48154E-05	0.000459998
ENSMUSG000000025931	Paqr8	86.21179291	0.931437595	0.215071634	4.330824927	1.48552E-05	0.000460372
ENSMUSG000000029644	Pdx1	191.3429796	1.392214242	0.321593066	4.329117722	1.49708E-05	0.000462512
ENSMUSG000000029190	D5Ert579e	4345.246964	0.686762319	0.158700093	4.327422288	1.50865E-05	0.000464932
ENSMUSG000000022617	Chkb	1701.682954	0.564894014	0.130650251	4.323711659	1.53426E-05	0.000471074
ENSMUSG000000022849	Hspbp1	186.1922187	0.627391324	0.145303146	4.317809643	1.57585E-05	0.000482951
ENSMUSG000000025138	Sirt7	1400.375829	0.444350142	0.103074095	4.310977857	1.62534E-05	0.000496283
ENSMUSG000000012519	MLK1	310.2629783	0.510525073	0.118501189	4.308185237	0.00001646	0.000498914
ENSMUSG000000073433	Arhgdig	27.30772399	1.133226522	0.263025708	4.308424944	1.64421E-05	0.000498914
ENSMUSG000000038253	Hoxa5	10.35570648	1.400779536	0.325336207	4.305636777	1.66506E-05	0.000503772
ENSMUSG000000059003	Grim2a	82.00832507	1.153525129	0.267966784	4.304731769	1.67188E-05	0.000504914
ENSMUSG000000050708	Fil1	8589.38781	0.568898748	0.132230367	4.302330543	1.69011E-05	0.000509491
ENSMUSG000000026437	Cdk18	2216.128896	0.640055213	0.14900315	4.295581768	1.74236E-05	0.00052051
ENSMUSG000000028943	Espn	1757.201193	0.578437222	0.134731451	4.293260542	1.76068E-05	0.000525038
ENSMUSG000000104060	Gm37954	80.19606586	1.033560626	0.240892276	4.290551125	0.000017823	0.000528832
ENSMUSG000000020111	Micu1	2729.649184	0.371916625	0.086734113	4.288008648	1.80282E-05	0.000533764
ENSMUSG000000073403	Gm10499	1321.852129	0.669889585	0.156425142	4.282493067	1.84811E-05	0.000542739
ENSMUSG000000054422	Fabp1	34812.54433	1.000903369	0.233728928	4.282325592	0.000018495	0.000542739
ENSMUSG000000026048	Ercc5	393.1743868	0.515492982	0.120491777	4.278242003	1.88375E-05	0.000551813
ENSMUSG000000030110	Ret	66.5956075	0.854587685	0.199858394	4.275965945	0.000019031	0.000556498
ENSMUSG000000025511	Tspan4	26.44944897	1.167324232	0.273062241	4.2749383	0.000019119	0.000557106
ENSMUSG000000020600	Slc7a15	2020.913742	0.799112648	0.187065174	4.271840831	1.93866E-05	0.000562924
ENSMUSG000000020709	Adap2	456.7885207	0.734776161	0.17209645	4.269560252	1.95859E-05	0.000567716
ENSMUSG000000027171	Prrg4	57.59405829	1.032514279	0.241866377	4.268909783	1.96431E-05	0.000568381
ENSMUSG000000021701	Plk2	142.2748675	1.153738071	0.270353612	4.267514914	1.97663E-05	0.000570949
ENSMUSG000000026082	Rev1	434.765649	0.606447624	0.142359552	4.259971418	2.04453E-05	0.000588512
ENSMUSG000000029062	Cdk11b	1859.305961	0.576921958	0.135505637	4.257549509	0.000020668	0.000593891
ENSMUSG000000107429	Gm44206	351.399682	0.670364399	0.157501613	4.256238304	2.07895E-05	0.00059635
ENSMUSG000000024958	Gpr137	346.3951024	0.676122131	0.159193161	4.247180763	2.16477E-05	0.0006167
ENSMUSG000000028600	Podn	589.8033208	0.915375722	0.215767051	4.242425878	2.21117E-05	0.000627759
ENSMUSG000000004677	Myo9b	1384.794605	0.657663433	0.155107419	4.240051429	2.23469E-05	0.000630121
ENSMUSG000000074170	Plekhh1	391.6212013	0.775662103	0.183884956	4.218192288	2.46269E-05	0.000690886
ENSMUSG000000097615	Gm2061	91.47683074	0.940795055	0.223634933	4.206834063	2.58973E-05	0.000714438
ENSMUSG000000106458	Gm42633	5.707631387	0.70207426	0.325798761	4.20568642	2.60291E-05	0.000716881
ENSMUSG000000026222	Sp100	738.3343058	0.775070148	0.184489171	4.201168791	2.65541E-05	0.000727713
ENSMUSG000000024818	Slc25a45	2366.460208	0.691905536	0.164996465	4.193456733	2.74735E-05	0.000745518
ENSMUSG000000043789	Vwce	312.6381795	0.763178346	0.182115427	4.190629869	2.78181E-05	0.000752405
ENSMUSG000000093580	Gm20706	110.0614903	1.265760898	0.302566667	4.183411585	2.87167E-05	0.000772926
ENSMUSG000000009614	Sardh	294.5989952	0.974752394	0.233158256	4.180647136	2.90681E-05	0.000779852
ENSMUSG000000041831	Syt3	233.6798705	0.665037165	0.159179117	4.177917155	2.94191E-05	0.000786836
ENSMUSG000000000732	Icosl	153.4236379	0.653761519	0.156633777	4.173822103	2.99532E-05	0.000799716
ENSMUSG000000059708	Akap17b	82.09432472	0.704349922	0.168803381	4.17260554	3.01136E-05	0.000802707
ENSMUSG000000028497	Hacd4	12.21830186	1.291715958	0.30994593	4.16755257	3.07888E-05	0.000816764
ENSMUSG000000039648	Ccbl1	648.5661015	0.537260462	0.12899321	4.165029005	3.11313E-05	0.000824377
ENSMUSG000000006241	Ccdc159	17.0257653	1.192138542	0.286247836	4.164707616	3.11752E-05	0.000824377
ENSMUSG000000104022	Gm37214	41.54655114	1.084426235	0.260538944	4.16224238	3.15138E-05	0.000830374
ENSMUSG000000088835	Gm23547	261.5540108	1.107115185	0.265991131	4.162225945	0.000031516	0.000830374
ENSMUSG000000032590	Apeh	2083.809641	0.437831976	0.105279697	4.158750355	3.19993E-05	0.000840807
ENSMUSG000000025467	Prp1	17539.5659	0.908135224	0.158301185	4.156221759	3.23554E-05	0.000847476



ENSMUSG00000067352	Gm14149	126.0660913	0.970260902	0.23347295	4.155774371	3.24188E-05	0.000847797
ENSMUSG00000028713	Cyp4b1	2457.39393	0.109222593	0.244893621	4.151092046	3.25423E-05	0.000849686
ENSMUSG00000037145	2210407C18Rik	2389.032768	1.016575963	0.244893621	4.151092046	3.30893E-05	0.000859906
ENSMUSG00000036718	Mical2	558.7262813	0.521225934	0.126029665	4.135740048	3.53813E-05	0.000910903
ENSMUSG00000025396	Hsd17b6	1265.712197	0.826939221	0.200383887	4.126775022	3.67886E-05	0.000941289
ENSMUSG00000002289	Angptl4	650.7666365	0.993676767	0.240782764	4.126860038	0.000036775	0.000941289
ENSMUSG000000056737	Capg	199.403874	1.096129482	0.265945102	4.121638162	3.76188E-05	0.000959568
ENSMUSG00000020277	Pfkl	1120.604649	0.591454463	0.143744048	4.114636206	3.87791E-05	0.00098613
ENSMUSG00000035504	Reep6	1781.025045	0.575720825	0.140044528	4.110984096	3.93976E-05	0.001000326
ENSMUSG000000090213	Tmem189	139.6660903	1.092603714	0.266267253	4.10341002	4.07105E-05	0.001025805
ENSMUSG00000053054	Adh6a	8051.971352	0.891671313	0.217383071	4.101843382	4.09872E-05	0.00103121
ENSMUSG00000104664	Gm35570	78.54365557	0.911549693	0.222376958	4.099119358	4.14725E-05	0.001038692
ENSMUSG00000031788	Kifc3	592.1299516	0.53675343	0.131054408	4.095653373	4.20979E-05	0.001052766
ENSMUSG00000037725	Ckap2	418.1176449	0.488750788	0.119370855	4.094389618	4.23282E-05	0.00105693
ENSMUSG00000001313	Rnd2	236.1322592	0.710964589	0.173901523	4.088317204	4.34514E-05	0.001081717
ENSMUSG00000061536	Sec22c	695.8084677	0.644080977	0.15776623	4.082502182	4.45534E-05	0.00105831
ENSMUSG00000027346	Gpcpd1	1322.251245	0.712797587	0.174805865	4.077652581	4.54927E-05	0.001123518
ENSMUSG00000034164	Emid1	13.35761614	1.235265934	0.302977475	4.077088357	4.56032E-05	0.001123518
ENSMUSG00000028389	Zfp37	47.79762957	0.236087398	0.303179581	4.077079971	4.56048E-05	0.001123518
ENSMUSG00000037573	Tob1	2455.090675	0.611503767	0.150052907	4.075254389	4.59641E-05	0.001130689
ENSMUSG00000022546	Gpt	4291.130849	0.582483285	0.142951604	4.074688681	4.60759E-05	0.001131762
ENSMUSG00000054932	Afp	308.8738759	0.962138185	0.219142107	4.071048684	0.000046802	0.001141142
ENSMUSG00000043461	Spsssb	14.34973264	1.275189039	0.313218015	4.071250625	4.67614E-05	0.001141142
ENSMUSG00000021798	Ldb3	1689.972574	0.507343258	0.124647395	4.070227517	4.69672E-05	0.00114326
ENSMUSG00000057982	Zfp809	252.5311054	0.652096689	0.160476481	4.063503178	4.83417E-05	0.00117008
ENSMUSG00000054151	Syne3	177.1175216	0.569409917	0.14016475	4.062433072	4.85639E-05	0.001173745
ENSMUSG00000107681	Gm43986	8.165012799	1.32402863	0.325992202	4.061534665	4.87512E-05	0.001174847
ENSMUSG00000065226	Gm25791	983.9327455	1.058174476	0.260638891	4.059925476	4.90884E-05	0.001181256
ENSMUSG00000033427	Upb1	402.4371842	0.934197345	0.230265473	4.057044824	4.96975E-05	0.001189012
ENSMUSG00000026203	Dnajb2	297.5059573	0.500466744	0.123410809	4.055291015	5.00719E-05	0.001195589
ENSMUSG00000033478	Fam160b1	1387.860256	0.550929354	0.13596773	4.051912567	5.08007E-05	0.00120814
ENSMUSG00000028307	Aldob	53867.15196	0.712220389	0.175801803	4.051268962	5.09406E-05	0.001208291
ENSMUSG00000039989	Cbx4	184.1114324	0.526347968	0.129986858	4.049239883	5.13843E-05	0.001217073
ENSMUSG00000073402	Gm8909	2670.472949	0.608507816	0.150291495	4.048850641	5.14698E-05	0.001217359
ENSMUSG00000064370	mt-Cytb	50230.39876	0.920522252	0.227379488	4.048396177	5.15698E-05	0.001217988
ENSMUSG00000024937	Ehbp11	1707.794933	0.477620955	0.118024054	4.046810286	5.19203E-05	0.001219318
ENSMUSG00000001435	Col18a1	64.82754039	0.856935804	0.211742576	4.047064235	0.000051864	0.001219318
ENSMUSG00000055866	Per2	706.1024516	0.901098608	0.222653906	4.04708196	5.18601E-05	0.001219318
ENSMUSG00000064796	Terc	185.7521719	0.756335737	0.186951118	4.045633657	5.21818E-05	0.001223726
ENSMUSG00000042672	Dcst1	144.5876882	0.797137566	0.197254185	4.041169341	5.31853E-05	0.001245498
ENSMUSG00000052229	Gpr17	151.5164051	1.09859427	0.272055666	4.038123096	5.38806E-05	0.001258225
ENSMUSG00000024899	Papss2	17231.47669	1.306314609	0.323615739	4.036622605	5.42262E-05	0.001264515
ENSMUSG00000024066	Xdh	18349.05905	0.750500732	0.186027732	4.034348666	0.000054754	0.001275029
ENSMUSG00000047735	Samd9l	1752.421393	0.49380565	0.122524139	4.030272339	5.57123E-05	0.001288298
ENSMUSG00000057074	Ces1g	194.6890723	1.132550031	0.28099899	4.030441646	5.56721E-05	0.001288298
ENSMUSG00000071335	G630090E17Rik	562.8801716	0.71967641	0.178694469	4.027412907	5.63939E-05	0.001302245
ENSMUSG00000040997	Abhd4	1023.010497	0.532635687	0.132386125	4.023349793	5.73762E-05	0.001319414
ENSMUSG00000057596	Trim30d	1776.069525	0.584447241	0.145407697	4.019369362	5.83541E-05	0.00133819
ENSMUSG00000104303	Gm36976	151.4582097	0.745833033	0.185686087	4.016633913	5.90353E-05	0.001344611
ENSMUSG00000072244	Trim6	29.43532959	1.063574388	0.264731432	4.017559912	5.88039E-05	0.001344611
ENSMUSG00000056515	Rab31	164.3653461	0.26559747	0.180976749	4.01465796	5.95321E-05	0.001353967
ENSMUSG00000020580	Rock2	3660.418162	0.488733756	0.12189237	4.009551663	6.08341E-05	0.001381685
ENSMUSG00000027799	Nbea	979.5064149	0.530963125	0.132520358	4.006653257	6.15852E-05	0.001393018
ENSMUSG00000004931	Apba3	1002.315979	0.531105078	0.132569543	4.006237539	6.16936E-05	0.00139357
ENSMUSG00000038188	Scarf1	111.299413	0.928083752	0.231741822	4.004817705	6.20653E-05	0.001400059
ENSMUSG00000048445	Ccdc57	93.29609904	0.693981954	0.173377717	4.002717102	6.26192E-05	0.001410633
ENSMUSG00000022974	Paxbp1	1372.767785	0.598227594	0.149499311	4.001540813	6.29313E-05	0.001415161
ENSMUSG00000079659	Tmem243	694.6073909	0.626731068	0.156631192	4.001317116	6.29909E-05	0.001415161
ENSMUSG00000052949	Rnf157	82.10812851	0.874468484	0.218938413	3.994130002	6.49322E-05	0.001454833
ENSMUSG00000025142	Aspsccr1	976.7733055	0.359760034	0.090126089	3.991741321	6.55899E-05	0.001463635
ENSMUSG00000027893	Ahcyl1	4789.62347	0.681062782	0.170645924	3.991087303	6.57711E-05	0.001465705
ENSMUSG00000038879	Nipal2	289.8985191	0.565997776	0.14190183	3.988657343	6.64483E-05	0.00147656
ENSMUSG00000026956	Uap111	1441.953096	0.588167125	0.147451416	3.988887595	6.63839E-05	0.00147656
ENSMUSG00000024112	Cacna1h	76.50199034	0.817050677	0.205047573	3.984688363	6.75687E-05	0.001495714
ENSMUSG00000039552	Rsp4a	11.35265608	1.287834347	0.323348541	3.982805501	6.81065E-05	0.001505608
ENSMUSG00000024140	Epas1	840.5843088	0.798761849	0.200910502	3.975709782	7.01697E-05	0.001545037
ENSMUSG00000070565	Rasal2	387.281	0.444995598	0.111971412	3.974189396	7.06194E-05	0.001552877
ENSMUSG00000031374	Zfp92	85.62999943	0.686741685	0.172862062	3.972772716	7.10408E-05	0.001558012
ENSMUSG00000045658	Pidp1	44.54944726	1.170363122	0.294573032	3.973083057	7.09483E-05	0.001558012
ENSMUSG00000067297	Ifit1b12	2754.330548	0.740326775	0.186487225	3.969852496	7.19171E-05	0.001564811
ENSMUSG00000020656	Grlh1	27.2885319	1.08034702	0.253885394	3.970432041	7.17424E-05	0.001564811
ENSMUSG00000068762	Gstm6	511.5782047	0.85335355	0.251313208	3.966665539	7.28852E-05	0.001579655
ENSMUSG00000020250	Txnrd1	6840.914417	0.447969318	0.112991361	3.964633368	7.35088E-05	0.001589018
ENSMUSG00000047371	Zfp768	612.2206481	0.4045864	0.102117468	3.961970541	7.43337E-05	0.00160267
ENSMUSG00000092341	Malat1	104001.3797	0.612711403	0.154643656	3.962085605	7.42979E-05	0.00160267
ENSMUSG00000052085	Dock8	1894.850705	0.633170643	0.159964639	3.958191296	7.55195E-05	0.001624011
ENSMUSG00000104136	Gm36955	40.81784633	1.090522956	0.276054506	3.950389986	0.000078024	0.001667058
ENSMUSG00000018378	Cuedc1	105.921277	0.735450122	0.186331761	3.946992815	7.91389E-05	0.001684369
ENSMUSG00000011179	Odc1	3297.502459	0.418683931	0.106223525	3.941536802	8.09612E-05	0.001718741
ENSMUSG00000017390	Aldoc	184.8001387	0.889223296	0.225646195	3.940785695	8.12152E-05	0.001721928
ENSMUSG00000097651	4930461G14Rik	6.019603267	1.282031421	0.325604221	3.937391902	0.000082372	0.001742
ENSMUSG00000020455	Trim11	613.1971257	0.471098109	0.119734161	3.93453385	8.33583E-05	0.001757217
ENSMUSG00000032875	Arhgef17	38.35394109	1.135013953	0.288485639	3.934386332	8.34095E-05	0.001757217
ENSMUSG00000026201	Stk16	1554.382782	0.445250175	0.113212222	3.93288079	8.39339E-05	0.001762448
ENSMUSG00000106948	Gm42785	342.2872804	0.882970376	0.224516824	3.932758171	8.39767E-05	0.001762448
ENSMUSG00000025085	Ablim1	1714.243029	0.476290875	0.121171339	3.930722234	8.46911E-05	0.001772952
ENSMUSG00000090863	A530084C06Rik	14.03974274	1.224821456	0.311665548	3.929922514	8.49732E-05	0.001776616
ENSMUSG00000026589	Sec16b	2241.684581	0.614385646	0.156518014	3.92533505	8.66091E-05	0.001803994
ENSMUSG00000001663	Gstt1	996.2514997	0.84161089	0.214396971	3.925479394	8.65572E-05	0.001803994
ENSMUSG00000022634	Yaf2	137.378749	0.577385507	0.147104232	3.925009496	8.67263E-05	0.001804169
ENSMUSG00000039960	Rhou	2066.511884	0.473080582	0.12065926	3.920797983	8.82562E-05	0.00182911
ENSMUSG00000068245	Phf11d	73.17021071	0.717592723	0.293366045	3.916861613	8.97092E-05	0.001852277

ENSMUSG000000104329	Gm37324	188.6339167	0.807729435	0.206412535	3.913180151	9.10885E-05	0.001876084
ENSMUSG00000032098	Treh	7188.900000	0.447546814	0.114708161	3.901612682	9.16353E-05	0.001885004
ENSMUSG00000029860	Zyx	1258.489061	0.84086126	0.215632359	3.899513334	0.000095554	0.001955907
ENSMUSG000000064345	mt-Nd2	10993.17175	0.489024474	0.125648876	3.89199242	9.63862E-05	0.00197051
ENSMUSG00000015094	Npdc1	584.5975511	1.268770405	0.326099857	3.890741981	9.94244E-05	0.00202513
ENSMUSG00000048001	Hes5	5.530085954	0.870643437	0.22383501	3.889666045	9.99382E-05	0.002033098
ENSMUSG000000027890	Gstm4	264.6832215	0.572688705	0.147334661	3.886992383	0.000100382	0.00203963
ENSMUSG00000022094	Slc39a14	4454.688247	0.617001188	0.158687573	3.88815065	0.000101494	0.002044677
ENSMUSG00000051977	Prdm9	192.9140931	0.399951586	0.103049594	3.887191784	0.000101011	0.002044677
ENSMUSG000000026976	Pax8	185.1343075	1.256442712	0.323196459	3.887550989	0.000101261	0.002044677
ENSMUSG00000063804	Lin28b	5.677058919	0.570464606	0.146865903	3.884254916	0.000102644	0.002063779
ENSMUSG00000025137	Pcyt2	4711.529968	0.581414553	0.150277848	3.881156342	0.000103961	0.002084248
ENSMUSG00000038563	Eftud1	1151.233913	0.689955202	0.17749451	3.880860113	0.000104088	0.002084268
ENSMUSG000000086040	Wipf3	423.5572625	0.68206774	0.176112631	3.872906435	0.000107545	0.002143147
ENSMUSG000000093661	Eif4e3	166.4231663	0.581414553	0.150277848	3.86893053	0.000109314	0.002175777
ENSMUSG00000020308	Cry1	308.2232597	0.435863954	0.112686488	3.867934511	0.000109761	0.002179449
ENSMUSG00000052102	Gnpda1	1221.274153	1.26681551	0.327516252	3.867947014	0.000109756	0.002179449
ENSMUSG00000102376	Gm37975	8.660543595	0.535503347	0.138551202	3.8650213	0.00011108	0.00219706
ENSMUSG000000086784	Isoc2a	370.6518055	0.366855116	0.095023378	3.86068275	0.000113071	0.00222252
ENSMUSG00000030822	Prr14	686.6970105	0.421777213	0.109451841	3.853541535	0.000116422	0.002273579
ENSMUSG00000025495	Tdss2	586.3314208	0.582124981	0.151129299	3.853784901	0.000116306	0.002273579
ENSMUSG00000052776	Oas1a	412.5621792	0.707357825	0.18378278	3.848879768	0.000118659	0.002314553
ENSMUSG00000039096	Rsad1	290.2580982	0.469652478	0.122080417	3.847074659	0.000119537	0.002328926
ENSMUSG00000013997	Nit1	1049.534388	0.8638827	0.224584451	3.846582858	0.000119777	0.002330865
ENSMUSG000000020036	Slc2a7	583.5058992	0.6194809	0.159245596	3.842794448	0.000121641	0.002361608
ENSMUSG00000058360	Gm10040	111.1354427	0.414966355	0.108210386	3.834810796	0.000125661	0.002431108
ENSMUSG000000026848	Tor1b	689.152935	0.401434794	0.104786553	3.83097622	0.000127636	0.002463565
ENSMUSG000000050501	Usp40	1304.058977	0.587203607	0.153380162	3.828415993	0.000128971	0.002486434
ENSMUSG00000036661	Dennd3	830.4262834	0.461383093	0.120636815	3.82456294	0.000131004	0.002519781
ENSMUSG000000003346	Abhd17a	2153.987598	0.531266078	0.138978302	3.822654839	0.000132023	0.002536423
ENSMUSG00000024777	Ppp2r5b	625.3217835	0.535154009	0.140018729	3.822017336	0.000132364	0.002540048
ENSMUSG000000024807	Synn1	1122.900884	0.550420423	0.144058705	3.820806418	0.000133016	0.002545165
ENSMUSG000000021288	Klc1	930.7667142	0.644485232	0.168674772	3.820875081	0.000132979	0.002545165
ENSMUSG00000023259	Slc26a6	8297.786204	0.463071354	0.121231048	3.81974224	0.000133591	0.002551777
ENSMUSG000000021182	Ccdc88c	2238.392639	0.593332455	0.155355995	3.81917965	0.000133896	0.002552148
ENSMUSG000000021236	Entpd5	4254.357919	0.679704051	0.178161388	3.815103034	0.000136126	0.00258827
ENSMUSG00000002083	Bbc3	82.31677187	0.548265598	0.143897731	3.81010592	0.000138907	0.002635106
ENSMUSG000000027412	Lpin3	1875.024897	0.709406425	0.186250529	3.808882736	0.000139596	0.002645147
ENSMUSG000000072972	Adam4	158.6348858	0.559607057	0.146943177	3.808322848	0.000139913	0.002648116
ENSMUSG000000020527	Myo19	481.022796	0.642327537	0.168903399	3.802928418	0.000142996	0.002701884
ENSMUSG000000040350	Trim7	213.0448267	0.149341117	0.302236785	3.802783688	0.000143079	0.002701884
ENSMUSG000000040265	Dnm3	36.61028818	0.672002532	0.176728796	3.802450687	0.000143272	0.002702442
ENSMUSG00000038195	Rilp	234.2301917	1.136187131	0.299066589	3.799110872	0.000145216	0.002732898
ENSMUSG00000020829	Slc46a1	2293.50046	0.42545673	0.112632027	3.79782051	0.000145409	0.002733423
ENSMUSG000000025165	Sectm1a	95.82094986	0.495284805	0.130529018	3.794442138	0.000147976	0.002769612
ENSMUSG000000025283	Sat1	1868.293449	0.167967739	0.308019317	3.791865237	0.00014952	0.002791714
ENSMUSG00000038704	Aspdh	14.2295247	0.619790246	0.163510806	3.790515515	0.000150335	0.002800622
ENSMUSG000000049038	Mterf2	223.4344313	0.621990614	0.164080186	3.790772246	0.00015018	0.002800622
ENSMUSG00000026107	Nabp1	245.7356592	1.240696007	0.32764527	3.786705081	0.000152658	0.002837524
ENSMUSG000000094405	Gm23143	37.13615974	0.42545673	0.112632027	3.777404533	0.000158471	0.002938985
ENSMUSG000000039834	Zfp335	801.3108472	0.699504029	0.185337155	3.774224496	0.000160506	0.002970081
ENSMUSG000000030972	Acsn5	253.7705408	1.236390158	0.327635402	3.773676931	0.000160859	0.002973292
ENSMUSG000000077575	Gm24888	29.78997673	0.672970587	0.178365408	3.772988243	0.000161304	0.002978194
ENSMUSG000000019647	Sema6a	1736.062278	0.523512895	0.139103405	3.763480088	0.000167854	0.003076666
ENSMUSG00000103738	Gm37652	6.875012461	0.988423228	0.262665471	3.763049728	0.000167854	0.003076666
ENSMUSG000000079470	Utp14b	845.0632555	0.73333813	0.194965879	3.761366528	0.000168988	0.003095927
ENSMUSG000000029061	Mmp23	27.20265821	0.766955227	0.203990233	3.759764457	0.000170073	0.003109127
ENSMUSG000000047394	Odf3b	200.8415011	0.766955227	0.203990233	3.758673213	0.000170817	0.003115668
ENSMUSG000000056035	Cyp3a11	12672.10678	0.1087643355	0.289511482	3.756822863	0.000172084	0.003135337
ENSMUSG000000004626	Stxbp2	2064.164787	0.93372219	0.248988656	3.75005916	0.000176793	0.003210543
ENSMUSG00000042498	D330045A20Rik	27.6877646	0.366124744	0.097651387	3.749304094	0.000177326	0.003213185
ENSMUSG000000037613	Tnfrsf23	41.48982241	0.596096218	0.159030882	3.74830479	0.000178034	0.00322249
ENSMUSG000000025377	Enthd2	804.8388437	1.225041268	0.327269199	3.743222007	0.000181676	0.00327411
ENSMUSG00000032066	Bco2	1805.188673	1.128921937	0.30169003	3.741992856	0.000182567	0.003286597
ENSMUSG000000065145	Vaultrc5	351.4132183	0.918709742	0.245617517	3.74040806	0.000183722	0.003303803
ENSMUSG000000047143	Dmrt2a	15.92949304	0.543121565	0.145227034	3.739810337	0.000184159	0.003308081
ENSMUSG000000000204	Slnf4	199.4490222	0.465930091	0.124605433	3.739243773	0.000184575	0.003311929
ENSMUSG000000029162	Khk	5494.550493	0.9030287	0.241517786	3.738973911	0.000184773	0.003311929
ENSMUSG000000036391	Sec24a	3815.449035	1.212014836	0.3242963	3.737368679	0.000185956	0.003326783
ENSMUSG000000073530	Pappa2	50.0066525	0.525546248	0.14074447	3.734045452	0.000188429	0.003365198
ENSMUSG000000040694	Apobec2	11.59684378	0.219062408	0.326529867	3.73338715	0.000188922	0.003368091
ENSMUSG00000029338	Antxr2	955.658635	0.194552061	0.194552061	3.729781748	0.000191646	0.003412982
ENSMUSG000000009633	G0s2	17.68078457	0.957349601	0.256957428	3.725712893	0.000194764	0.003459536
ENSMUSG000000045348	Nyap1	222.0513504	0.295768186	0.079548756	3.718074292	0.000200747	0.003555971
ENSMUSG00000067224	Gm3695	26.36306318	0.562565558	0.151305199	3.718084794	0.000200739	0.003555971
ENSMUSG000000027466	Rbck1	2048.563562	0.752444568	0.202541834	3.715008166	0.000203197	0.003591694
ENSMUSG000000003863	Ppfia3	203.7115387	0.484840378	0.130527773	3.714461422	0.000203637	0.003591809
ENSMUSG00000039110	Mycbpap	113.2844082	0.706013461	0.190064553	3.714598277	0.000203527	0.003591809
ENSMUSG00000026576	Atp1b1	24621.06637	0.19085226	0.19085226	3.712890526	0.000204906	0.003606513
ENSMUSG000000067231	Cyp2c65	3839.947832	0.203074133	0.3712890419	3.712890419	0.000204906	0.003606513
ENSMUSG00000026639	Lamb3	1130.832279	0.490975959	0.132337981	3.710015491	0.000207247	0.003639987
ENSMUSG00000021751	Acox2	271.2616713	0.99881673	0.269329992	3.708523962	0.000208471	0.003653751
ENSMUSG000000062729	Ppox	417.4774204	1.142935757	0.30858906	3.703746842	0.000212430	0.003711514
ENSMUSG00000015962	1700016C15Rik	64.56256521	0.743428701	0.200984209	3.698940845	0.000216501	0.00376267
ENSMUSG00000106619	Gm9353	14.10704472	0.172038476	0.316930624	3.698091599	0.000217227	0.003771325
ENSMUSG000000002475	Abhd3	1231.820214	0.606619342	0.164168107	3.695110771	0.000219791	0.003811856
ENSMUSG00000044788	Fads6	45.61396231	0.482209767	0.130520737	3.694506927	0.000220314	0.003812948
ENSMUSG000000061728	Btnc17-ps	1738.547317	0.578703176	0.156652207	3.694191016	0.000220588	0.00381371
ENSMUSG000000062646	Ganc	503.7829251	0.365556505	0.099047235	3.690729016	0.000223612	0.003853941
ENSMUSG00000027488	Snta1	251.1606999	0.75405617	0.202693	3.689071607	0.000225074	0.003871084
ENSMUSG00000030805	Stx4a	583.5426988					
ENSMUSG000000064367	mt-Nd5	17884.15291					

ENSMUSG00000028992	Nmnat1	338.5120174	0.513002624	0.139078492	3.688583457	0.000225506	0.003874498
ENSMUSG00000064363	mt-Nd4	13846.53144	0.139078492	0.139078492	3.688583457	0.000225506	0.003874498
ENSMUSG00000072571	Tmem253	545.9014649	0.673184334	0.182808512	3.682456187	0.000230998	0.003946567
ENSMUSG00000040829	Zmynd15	14.65387677	1.114288503	0.302631624	3.68199625	0.000231415	0.003947384
ENSMUSG00000037151	Lrrc20	124.1568116	0.535572509	0.145482888	3.681343661	0.000232008	0.003953436
ENSMUSG00000031767	Nudt7	441.4457448	0.579285784	0.157383853	3.680719298	0.000232577	0.003955152
ENSMUSG00000038976	Ppp1r9b	1009.602308	0.322485796	0.08767266	3.678293719	0.0002348	0.003976482
ENSMUSG00000079507	H2-Q1	2723.794587	0.675061033	0.183542144	3.677962002	0.000235105	0.003977592
ENSMUSG00000024340	Btln2	2944.982821	0.597493872	0.162525924	3.676298885	0.000236642	0.003999519
ENSMUSG00000033526	Ppip5k1	2243.51642	0.493987389	0.13440951	3.675241363	0.000237625	0.004009984
ENSMUSG00000098037	Gm7765	7.780137	1.186114721	0.322977526	3.672437321	0.000240248	0.004041896
ENSMUSG00000004815	Dgkq	2855.031833	0.569792243	0.155270904	3.669665264	0.000242868	0.004077959
ENSMUSG00000061589	Dot1l	1860.935871	0.509727862	0.139063547	3.665431189	0.000246922	0.004135323
ENSMUSG00000031379	Pir	43.23595058	0.81067311	0.221223311	3.664501301	0.000247821	0.004142008
ENSMUSG00000063524	Eno1	8131.520437	0.543280862	0.148320549	3.662883309	0.000249392	0.004156788
ENSMUSG00000036856	Wnt4	49.18618869	0.103792823	0.301355557	3.662759145	0.000249513	0.004156788
ENSMUSG00000106631	Gm42669	127.5170575	0.882220715	0.240925185	3.661803616	0.000250446	0.004164886
ENSMUSG00000029407	Uso1	2244.486314	0.402871558	0.110180982	3.656452797	0.00025573	0.004244239
ENSMUSG00000024163	Mapk8ip3	1168.936461	0.518978318	0.142124847	3.651566424	0.000260646	0.004308579
ENSMUSG00000091813	Ces2h	25.44304993	1.093257109	0.299595776	3.649107213	0.000263153	0.004345698
ENSMUSG00000019943	Atp2b1	4708.270371	0.643954907	0.176523158	3.647991084	0.000264299	0.004358385
ENSMUSG00000010122	Slc47a1	763.7843099	0.817768938	0.224178532	3.64784679	0.000264447	0.004358385
ENSMUSG00000079055	Slc8a3	12.14083386	1.173415368	0.322574074	3.637661741	0.000275124	0.004511932
ENSMUSG00000026672	Optn	3860.679927	0.562563882	0.154726016	3.635871316	0.000277043	0.0045389
ENSMUSG00000034949	Zfr2	269.8638391	0.1712580207	0.19603353	3.634991458	0.00027799	0.004545854
ENSMUSG00000083020	Gm15331	51.46011808	0.939203289	0.258380089	3.634967747	0.000278015	0.004545854
ENSMUSG00000074261	Erich4	916.4242893	0.602465636	0.165783724	3.634045744	0.000279011	0.00455322
ENSMUSG00000062661	Ncs1	12.50659853	1.159555243	0.319081389	3.634042234	0.000279015	0.00455322
ENSMUSG00000055865	Fam19a3	21.9052144	1.152920995	0.317499874	3.631248669	0.000282053	0.0045885
ENSMUSG00000032454	Rbp2	26703.19735	1.181853168	0.22245589	3.630075513	0.000283338	0.004601126
ENSMUSG00000024862	Klc2	167.8383351	0.521171871	0.143673449	3.627475184	0.000286206	0.004643151
ENSMUSG00000054051	Erc6	736.6563571	0.472819245	0.130555524	3.621595081	0.000292792	0.004727415
ENSMUSG00000042816	Gpr151	46.5977872	1.114228935	0.307665022	3.621565197	0.000292826	0.004727415
ENSMUSG00000043059	Zfp513	305.2993864	0.526197076	0.145414081	3.618611563	0.000296188	0.004763137
ENSMUSG00000021234	Fam161b	59.35188701	0.820910059	0.226974053	3.616757281	0.000298317	0.004788086
ENSMUSG00000018862	Otop3	524.956014	1.181852842	0.326835688	3.616045875	0.000299137	0.004796613
ENSMUSG00000069805	Fbp1	937.4798079	0.698600051	0.193639743	3.607730727	0.000308887	0.004939527
ENSMUSG00000104377	Gm37515	408.7847206	0.768811473	0.213133501	3.607182679	0.00030954	0.004939527
ENSMUSG00000064925	Snora62	28.65853104	1.17930527	0.326925372	3.607261384	0.000309446	0.004939527
ENSMUSG00000020456	Ogdh	17147.75188	0.460873778	0.127937768	3.602327803	0.00031538	0.005013428
ENSMUSG00000042826	Fgf11	45.69724736	0.796215996	0.221131933	3.6006378	0.000317438	0.005041297
ENSMUSG00000032473	Cldn18	3.89960858	1.049362386	0.292151059	3.591848646	0.000328341	0.005184653
ENSMUSG00000038155	Gstp2	757.388854	0.635510533	0.177126113	3.587898592	0.000333354	0.00524384
ENSMUSG00000017868	Sgk2	379.8313158	0.803639254	0.223983257	3.587943426	0.000333297	0.00524384
ENSMUSG00000034993	Vat1	2639.745158	0.05089065	0.098993893	3.586979519	0.000334531	0.005257362
ENSMUSG00000092837	Rpph1	88848.11381	1.102228766	0.307490024	3.584600087	0.000337595	0.005300499
ENSMUSG00000074922	Fam122a	84.30390296	0.629513781	0.175642532	3.584062332	0.000338291	0.005306405
ENSMUSG00000025047	Pdcd11	1207.586798	0.347161454	0.096967116	3.580197802	0.000343334	0.005380417
ENSMUSG00000025192	Entpd7	4201.049665	0.582849687	0.162837545	3.579332305	0.000344473	0.005389899
ENSMUSG00000059406	Tmprss9	72.4389453	0.991904064	0.277243379	3.577737605	0.000346581	0.005415942
ENSMUSG00000036368	Rmdn2	71.85878945	0.78423731	0.222937938	3.572401079	0.000353723	0.005506738
ENSMUSG00000104486	Gm38066	19.45335062	1.124590331	0.315041837	3.569653928	0.000357453	0.005559637
ENSMUSG00000064215	Ifi27	564.0427857	0.621730889	0.174193444	3.569197992	0.000358076	0.005564101
ENSMUSG00000090516	Rps11-ps1	33.47824042	1.029831736	0.288599201	3.568380413	0.000359195	0.005576263
ENSMUSG00000089943	Ugt1a5	73.25236332	0.954851089	0.267671553	3.567249033	0.000360749	0.005595147
ENSMUSG00000061740	Cyp2d22	690.3292412	0.645282112	0.181041048	3.564286216	0.000364848	0.005648155
ENSMUSG00000010358	Ifi35	1634.208595	0.418460441	0.117459272	3.562600331	0.0003672	0.005673968
ENSMUSG00000045991	Onecut2	1971.433451	0.842568422	0.236555134	3.561826828	0.000368283	0.005680127
ENSMUSG00000029322	Plac8	22795.51502	0.702956354	0.197451259	3.56015129	0.000370641	0.005711181
ENSMUSG00000029161	Cgref1	5014.441618	0.629139961	0.176985632	3.554733543	0.000378362	0.005808562
ENSMUSG00000021908	Gm6768	64.34126125	0.867056711	0.243942434	3.554349677	0.000378915	0.005809912
ENSMUSG00000087404	Gm11752	9.184462924	1.164629525	0.327699106	3.553960034	0.000379477	0.005809912
ENSMUSG00000037752	Xkr8	60.86545283	0.782521391	0.220257964	3.552749589	0.000381227	0.005825181
ENSMUSG00000037904	Ankrd9	637.8004125	0.521960795	0.146965134	3.551596089	0.000382902	0.005835035
ENSMUSG00000007721	Ccdc124	476.7602054	0.373698786	0.105238395	3.550973807	0.000383809	0.005841199
ENSMUSG00000027580	Heliz2	4242.120218	0.700409384	0.197252028	3.550834891	0.000384011	0.005841199
ENSMUSG00000074882	Cyp2c68	1186.754203	0.521005456	0.14675405	3.550194727	0.000384946	0.005844698
ENSMUSG00000032849	Abcc4	132.6861919	0.67634871	0.190525279	3.549915869	0.000385354	0.005845539
ENSMUSG00000040345	Arhgap9	83.48665534	0.888521589	0.250533465	3.546518585	0.000390357	0.005910614
ENSMUSG00000032386	Trip4	825.7301785	0.420832083	0.118720287	3.544736053	0.000393006	0.005939878
ENSMUSG00000019996	Map7	2340.06552	0.338537158	0.095527076	3.543886949	0.000394274	0.005948196
ENSMUSG00000000386	Mx1	95.24796826	0.977993977	0.275962976	3.543931834	0.000394207	0.005948196
ENSMUSG00000038302	Lace1	454.6717468	0.396362494	0.111865782	3.543196918	0.000395307	0.005958361
ENSMUSG00000065037	Rn7sk	194469.2874	0.793217432	0.224127056	3.539141801	0.00040143	0.006033058
ENSMUSG00000093385	A330044P14Rik	43.91551304	0.81782374	0.231092061	3.538952127	0.000401719	0.006033058
ENSMUSG00000037593	BC030499	25.01309048	0.959763102	0.271235136	3.538491055	0.000402421	0.006038135
ENSMUSG00000003623	Crot	3440.660588	0.573305954	0.162330319	3.531724432	0.000412859	0.006183566
ENSMUSG00000036120	Rfxank	456.746025	0.390768083	0.110688322	3.530346084	0.000415016	0.006202222
ENSMUSG00000090150	Acad11	3219.770548	0.502852388	0.14243372	3.530430776	0.000414884	0.006202222
ENSMUSG00000035637	Ghrpr	371.7756519	0.576847951	0.163403215	3.53021177	0.000415227	0.006202222
ENSMUSG00000004789	Dlst	7238.396713	0.473845574	0.13436711	3.526499718	0.000421092	0.006284158
ENSMUSG00000033634	Cml2	109.7108199	1.149620056	0.326085606	3.525516104	0.000422659	0.006301868
ENSMUSG00000021224	Numb	2084.458768	0.441684498	0.12531301	3.524649986	0.000424043	0.00630697
ENSMUSG00000026614	Slc30a10	823.3842901	1.102848295	0.312922417	3.524350561	0.000424522	0.00630697
ENSMUSG00000003934	Efnb3	20.87369397	1.029941825	0.292498244	3.521189773	0.000429615	0.006376918
ENSMUSG00000058135	Gstm1	1183.842777	0.780887256	0.221879027	3.51942798	0.000432478	0.006413678
ENSMUSG00000029119	Man2b2	932.6736078	0.374580014	0.106476853	3.517947842	0.000434898	0.006443795
ENSMUSG00000020196	Cabin1	2174.628654	0.427842375	0.121679856	3.51613152	0.000437884	0.006476465
ENSMUSG00000031378	Abcd1	2255.397098	0.553017194	0.157306136	3.515547506	0.000438848	0.006482618
ENSMUSG00000017493	Igfbp4	347.2773892	0.596084516	0.169563488	3.515406076	0.000439082	0.006482618
ENSMUSG00000039157	Fam102a	2861.678677	0.482766245	0.137359319	3.514623173	0.000440378	0.006495973
ENSMUSG00000086434	Gm15200	30.51238136	0.953517689	0.14242478	3.514074525	0.000441289	0.006497843

ENSMUSG00000019179	Mdh2	14327.86295	0.443649104	0.126325088	3.511963537	0.000444809	0.006543863
ENSMUSG00000075467	Dnlz	473.423554	0.47876916	0.136440734	3.508899915	0.000449759	0.006599896
ENSMUSG00000024851	Pitpnm1	981.0821748	0.607792288	0.173305755	3.507051959	0.000449812	0.006599896
ENSMUSG000000053192	Mlt11	123.229495	0.346782056	0.098929895	3.505331268	0.000453101	0.006636404
ENSMUSG00000043085	Tmem82	847.0596137	0.412944658	0.117899797	3.502505249	0.00045604	0.006667667
ENSMUSG00000036948	BC037034	424.0333188	0.524141571	0.149842668	3.49794607	0.000460905	0.006721202
ENSMUSG000000021495	Fam193b	747.6581032	0.492160797	0.140770224	3.496199566	0.000468856	0.006830959
ENSMUSG00000006589	Aprt	2059.046199	0.416252692	0.119382837	3.486704644	0.000471936	0.006866969
ENSMUSG000000065041	Gm24044	28.38570081	0.39526855	0.113414049	3.485931546	0.000472984	0.006866969
ENSMUSG000000066338	Abhd1	109.8442344	0.572046357	0.163800628	3.492333106	0.000478821	0.006937662
ENSMUSG00000027690	Slc2a2	11159.65239	0.226144968	0.13662033	3.487895756	0.000480512	0.006939796
ENSMUSG00000044328	Tp53i13	188.2705756	0.47651747	0.119382837	3.486704644	0.000486838	0.007012834
ENSMUSG00000034255	Arhgap27	1476.070361	0.416252692	0.119382837	3.486704644	0.000489011	0.00703192
ENSMUSG00000078185	Chml	546.0608805	0.713091619	0.204504425	3.486925125	0.000488608	0.00703192
ENSMUSG000000021216	Tubal3	1628.846294	0.474391793	0.136087524	3.485931546	0.000490427	0.007046162
ENSMUSG000000020752	Recql5	485.2564259	0.39526855	0.113414049	3.485181549	0.000491803	0.007053718
ENSMUSG00000109265	RP23-244C22.6	45.29894155	0.921994462	0.26454642	3.485189712	0.000491788	0.007053718
ENSMUSG00000030771	Micalcl	213.070329	0.531623307	0.152651033	3.484659866	0.000492763	0.007061375
ENSMUSG00000070390	Nlfp1b	459.1456116	0.572046357	0.170249449	3.484373167	0.000493291	0.007062839
ENSMUSG00000030905	Crym	61.62100108	0.880168999	0.253192073	3.476289712	0.000508403	0.007260394
ENSMUSG00000077192	Snora17	33.14946809	1.125091175	0.324579772	3.466300955	0.000527672	0.007471227
ENSMUSG000000028655	Mfsd2a	415.0355546	0.770530829	0.222370518	3.465076371	0.000530081	0.007492534
ENSMUSG00000046718	Bst2	164.3347252	0.737274564	0.21282867	3.46416939	0.000531872	0.007511439
ENSMUSG000000009621	Vav2	1617.061277	0.469597369	0.135594135	3.463257242	0.000533678	0.007530536
ENSMUSG00000042581	Thsd7b	5.299929276	1.038580222	0.299967228	3.462312293	0.000535555	0.007550602
ENSMUSG00000020400	Trip1	1591.827591	0.435257495	0.125827474	3.459161035	0.000541861	0.00762653
ENSMUSG000000085840	Gm11261	33.25081024	0.931585856	0.269347771	3.458672969	0.000542844	0.007633882
ENSMUSG000000060950	Trmt61a	243.1587018	0.506367005	0.146533955	3.455629132	0.00054901	0.007687997
ENSMUSG00000042632	Pla2g6	528.2222016	0.434697394	0.125931853	3.451846239	0.000556765	0.007780391
ENSMUSG000000064901	Snora21	160.2348172	1.29362956	0.327379064	3.449710381	0.000561188	0.007825485
ENSMUSG00000036067	Slc2a6	12.63960122	1.094883879	0.317408812	3.449443862	0.000561743	0.007825887
ENSMUSG000000034377	Tulp4	3383.809968	0.272383666	0.078974729	3.448997785	0.000562671	0.007826418
ENSMUSG000000019810	Fuca2	2485.38347	0.469915736	0.136299987	3.447657977	0.00056547	0.007856626
ENSMUSG00000106206	Gm43094	120.8771898	0.734101744	0.212935009	3.447538976	0.000565719	0.007856626
ENSMUSG000000021133	Susd6	1997.348378	0.410586489	0.119109369	3.447138488	0.000566558	0.007856477
ENSMUSG000000018599	Mief2	205.5077572	0.556341813	0.161396146	3.447057603	0.000566728	0.007856477
ENSMUSG00000022853	Ehhadh	3134.334658	0.513024313	0.148902352	3.445374144	0.00057027	0.007892377
ENSMUSG000000076680	Ighv6-6	6.896730594	1.123249149	0.326050567	3.445015166	0.000571027	0.007896275
ENSMUSG000000027286	Lrrc57	277.9056021	0.513177777	0.148994312	3.444277584	0.000572588	0.007911251
ENSMUSG00000105549	Gm43540	324.2564445	0.821412835	0.23852197	3.443761738	0.000573681	0.00791976
ENSMUSG00000036216	Leap2	2016.588889	1.051401032	0.305461338	3.442010167	0.000577409	0.007960502
ENSMUSG000000065728	Gm26175	8.541990713	0.053029714	0.305942174	3.441924011	0.000577593	0.007960502
ENSMUSG000000050106	Tmc8	141.977729	0.488578444	0.141976222	3.441269516	0.000578992	0.007966539
ENSMUSG000000021188	Trip11	3346.233326	0.489435469	0.142217953	3.441446442	0.000578613	0.007966539
ENSMUSG000000034958	Atcay	14.61841692	1.023415333	0.297547242	3.439505355	0.000582778	0.008011993
ENSMUSG00000026586	Prrx1	329.0467782	0.840921196	0.244666752	3.43700642	0.000588182	0.008079579
ENSMUSG00000040447	Spns2	889.9663628	0.682444947	0.198747482	3.433728768	0.00059534	0.008164376
ENSMUSG000000015127	Unkl	369.8629178	0.527111851	0.153525774	3.433376941	0.000596113	0.008168222
ENSMUSG000000021416	Eci3	909.2842046	0.72254965	0.210558199	3.43159114	0.000600052	0.008201858
ENSMUSG000000094472	Gm21897	660.3734348	0.725571907	0.211461717	3.431221113	0.000600871	0.008206289
ENSMUSG000000022598	Pscs	4.231020317	1.015149106	0.295986771	3.429711071	0.000604224	0.008238519
ENSMUSG00000025950	Idh1	6104.951739	0.642941873	0.187658307	3.426130621	0.000612246	0.008334184
ENSMUSG000000026426	Arl8a	369.1634741	0.385188256	0.112439354	3.425742348	0.000613122	0.00833926
ENSMUSG000000060935	Tmem263	1086.020226	0.629014863	0.183639338	3.425272983	0.000614182	0.008346834
ENSMUSG00000017639	Rab11fip4	518.4825989	0.483378333	0.141185564	3.423709337	0.000617727	0.008388129
ENSMUSG00000070985	Acnat1	446.6717478	0.420100715	0.122744307	3.422567831	0.000620326	0.008416537
ENSMUSG000000021180	Rps6ka5	264.1534938	0.594517921	0.173897497	3.418783656	0.000629017	0.008518805
ENSMUSG000000025194	Abcc2	11341.28288	0.675713936	0.197899154	3.414435704	0.000639143	0.008622447
ENSMUSG000000026409	Pfkfb2	813.3427164	0.420358215	0.123122526	3.414145475	0.000639824	0.00862462
ENSMUSG000000020806	Rhbdf2	579.7205641	0.430107945	0.126016023	3.413121078	0.000642234	0.008643052
ENSMUSG000000098343	Mir6240	6.847602842	1.04281137	0.305862487	3.409412452	0.00065103	0.008726008
ENSMUSG000000032334	Abcf3	933.5707442	0.340951875	0.100036063	3.408289606	0.000653715	0.008747854
ENSMUSG000000032637	Atxn2l	1554.602509	0.475664976	0.139678436	3.405428861	0.000660602	0.008804489
ENSMUSG00000061689	Dlgap4	434.9908316	0.356547976	0.104773467	3.403036918	0.000666413	0.008860564
ENSMUSG000000094806	Cyp2d10	12.08025094	1.113664224	0.327407872	3.401458303	0.000670274	0.008897626
ENSMUSG000000034947	Tmem106a	930.9518185	0.54689538	0.160893217	3.399120184	0.00067603	0.008966862
ENSMUSG000000086265	Marcks1-ps4	66.9233119	1.041641938	0.306488854	3.398629098	0.000677245	0.008968627
ENSMUSG000000072720	Myo18b	9.884444459	1.110771927	0.32682176	3.398708599	0.000677048	0.008968627
ENSMUSG000000020658	Efr3b	1184.078108	0.727454897	0.214189347	3.396316883	0.000682992	0.009015935
ENSMUSG000000027340	Slc23a2	1825.32584	0.733879808	0.216077009	3.39638081	0.000682833	0.009015935
ENSMUSG000000002147	Stat6	2982.141845	0.269151015	0.079283824	3.394778407	0.000686842	0.009052333
ENSMUSG00000017830	Dhx58	189.1911459	0.547043918	0.161294406	3.391586432	0.000694892	0.009124134
ENSMUSG000000021213	Akr1c13	1949.486809	0.833033936	0.245612893	3.391653939	0.000694721	0.009124134
ENSMUSG000000074336	Apoc4	6.914836075	1.108958641	0.327465691	3.386488023	0.000707934	0.009256735
ENSMUSG00000027298	Tyro3	280.4529427	0.728218471	0.215170597	3.384377241	0.000713399	0.009306182
ENSMUSG000000060181	Slc35e3	287.9121615	0.824636385	0.243765601	3.382907108	0.000717229	0.009341441
ENSMUSG000000054509	Parp4	1689.948742	0.494893324	0.146304713	3.382620529	0.000717978	0.009341441
ENSMUSG00000022948	Setd4	87.24174945	0.609715794	0.180283727	3.381979095	0.000719656	0.009351019
ENSMUSG000000001065	Zfp276	636.1077472	0.434695475	0.128557512	3.381330807	0.000721356	0.009365771
ENSMUSG000000041762	Gpr155	1036.948665	0.694211383	0.205343203	3.380737094	0.000722917	0.009378685
ENSMUSG00000038280	Ostm1	348.8198412	0.437380364	0.129433925	3.379178713	0.000727027	0.009421269
ENSMUSG000000055692	Tmem191c	78.83772159	0.620484796	0.183626333	3.379062173	0.000727336	0.009421269
ENSMUSG000000017843	Ppp2r5c	1800.302004	0.26381793	0.078117588	3.377189929	0.000732305	0.009448725
ENSMUSG00000003585	Sec14l2	3205.754225	0.555021478	0.164326972	3.377543395	0.000731364	0.009448725
ENSMUSG00000079560	Hoxa3	40.67466243	1.0351662	0.306498568	3.37739327	0.000731764	0.009448725
ENSMUSG000000020777	Acox1	12727.6665	0.515521344	0.152733291	3.375304365	0.000737341	0.009506309
ENSMUSG00000049577	Zfpm1	1579.838051	0.529730902	0.157189966	3.370004566	0.000751669	0.009646036
ENSMUSG000000032120	C2cd2l	2616.544041	0.509424864	0.151224324	3.368670132	0.000755318	0.009662937
ENSMUSG000000064128	Cenpj	186.650018	0.512665652	0.152178504	3.368844076	0.000754841	0.009662937
ENSMUSG000000090124	Ugt1a7c	3078.49817	0.543408278	0.161410614	3.366620477	0.000760953	0.009704719
ENSMUSG000000051727	Kctd14	222.6222367	0.799394248	0.237592553	3.364559359	0.00076666	0.009762843
ENSMUSG000000038496	Slc19a3	167.3955902	1.100588083	0.170767663	3.363894403	0.000768509	0.009778884



ACCEPTED MANUSCRIPT

# ACCEPTED MANUSCRIPT

## DownRegulated results\_001\_RNAse

**Table S1 Downregulated genes in intestinal epithelial crypts from H2bdlEC vs. H2b fl/fl**

Gene_ID	GENE	baseMean	negLog10Padj	negLog10Padj	negLog10Padj	negLog10Padj	negLog10Padj
ENSMUSG000000087150	BC064078	115.3846421	-3.212314968	0.24321921	-13.2074887	7.94305E-40	2.63391E-36
ENSMUSG000000029335	Bmp3	710.7275362	-2.782899312	0.222465638	-12.50934451	6.63696E-36	1.57201E-32
ENSMUSG000000084939	Gm830	65.58511538	-2.77621006	0.254645955	-10.90223507	1.1246E-27	1.33185E-24
ENSMUSG000000053536	Cstf2t	502.3033958	-1.770211682	0.183561173	-9.643715232	5.22615E-22	4.81386E-19
ENSMUSG000000022026	Olfrn4	7400.886019	-1.568480414	0.164257512	-9.548911329	1.31066E-21	1.08654E-18
ENSMUSG000000022332	Khdrbs3	59.51391951	-2.657445874	0.283226916	-9.382744796	6.42772E-21	4.84416E-18
ENSMUSG000000021846	Peli2	60.58796703	-2.279726646	0.248805594	-9.162682437	5.0623E-20	3.49721E-17
ENSMUSG000000020674	Pxdn	128.2066387	-2.68624293	0.297239139	-9.037312316	1.60571E-19	1.02395E-16
ENSMUSG000000036298	Slc2a13	94.77358484	-2.102227958	0.239109011	-8.791922765	1.47022E-18	8.40559E-16
ENSMUSG000000028412	Slc44a1	4682.252302	-0.7033195	0.0802332	-8.765941001	1.85223E-18	1.02367E-15
ENSMUSG000000026380	Tfcp2l1	1200.147793	-1.098896143	0.126986456	-8.6536484	4.98787E-18	2.58434E-15
ENSMUSG000000017009	Sdc4	2991.704767	-0.913897818	0.107930241	-8.467486137	2.50746E-17	1.22275E-14
ENSMUSG000000024766	Lipo1	72.09918721	-1.854731973	0.219210021	-8.460981671	2.65136E-17	1.25599E-14
ENSMUSG000000024935	Slc1a1	1458.942241	-1.469317057	0.182636042	-8.045055292	8.62065E-16	3.66488E-13
ENSMUSG000000063171	Rps4l	67.18243846	-2.064624558	0.259987039	-7.941259551	2.00138E-15	7.9007E-13
ENSMUSG000000054752	Fsd1l	905.0646162	-0.784065883	0.101879149	-7.696038793	1.40349E-14	5.17109E-12
ENSMUSG000000095915	Lyz1	49483.8227	-1.450549636	0.197860384	-7.331177719	2.28139E-13	6.75454E-11
ENSMUSG000000027082	Tfpi	61.79829065	-2.066763356	0.282594526	-7.31352935	2.60215E-13	7.43857E-11
ENSMUSG000000021932	Rnaseh2b	133.6655405	-1.740582207	0.239578105	-7.265197322	3.72494E-13	1.04677E-10
ENSMUSG000000095115	Itihplp2	1074.315078	-1.176524766	0.163585711	-7.192099842	6.38023E-13	1.73417E-10
ENSMUSG000000022048	Dpysl2	721.9687545	-0.897220824	0.126470925	-7.094285295	1.30022E-12	3.31655E-10
ENSMUSG000000037169	Mycn	52.29881002	-1.765905885	0.249072281	-7.089933395	1.34177E-12	3.37068E-10
ENSMUSG000000078670	Fam174b	281.1565092	-1.127224899	0.160405328	-7.027353243	2.10488E-12	5.13219E-10
ENSMUSG000000020140	Lgr5	233.825461	-1.491381024	0.213524118	-6.984602211	2.85664E-12	6.76616E-10
ENSMUSG000000005533	Igf1r	503.3347403	-1.22175441	0.17537186	-6.966648537	3.2458E-12	7.47436E-10
ENSMUSG000000020376	Rnf130	245.0193296	-1.038940279	0.150046949	-6.924101313	4.38752E-12	0.000000001
ENSMUSG000000036242	3632451O6Rik	49.92186469	-1.867786816	0.270523362	-6.904345714	5.04353E-12	1.10029E-09
ENSMUSG000000024975	Pdcd4	2254.361173	-0.838347023	0.12320749	-6.804351128	1.01506E-11	2.13033E-09
ENSMUSG000000029191	Rfc1	996.5148002	-0.570832847	0.085057162	-6.711167331	1.93074E-11	3.8109E-09
ENSMUSG000000026655	Fam107b	1057.179047	-0.990869681	0.148834799	-6.657513492	2.78499E-11	5.24717E-09
ENSMUSG000000053141	Ptprt	61.92894966	-1.655934535	0.258716693	-6.400570894	1.54797E-10	2.61891E-08
ENSMUSG000000000394	Gcg	219.502473	-1.211165856	0.191028097	-6.340249816	2.29393E-10	3.76568E-08
ENSMUSG000000042367	Gjb3	381.8976617	-1.082418818	0.172176364	-6.286686458	3.24313E-10	5.2205E-08
ENSMUSG000000040412	5330417C22Rik	1417.61392	-1.135576191	0.180998892	-6.273940026	3.52024E-10	5.61208E-08
ENSMUSG000000023886	Smoc2	1231.363962	-0.8868874	0.142176373	-6.237937989	4.43376E-10	6.93508E-08
ENSMUSG000000018927	Ccl6	946.3669321	-1.251030271	0.200767684	-6.231233275	4.62777E-10	7.17089E-08
ENSMUSG000000023150	lvns1abp	10044.39619	-0.826573585	0.121669917	-6.199210176	5.67472E-10	8.71175E-08
ENSMUSG000000042249	Adrbk2	243.2753061	-0.944773008	0.153053169	-6.172841867	6.70733E-10	1.01098E-07
ENSMUSG000000005973	Rcn1	154.6088705	-1.126842935	0.1826952	-6.167884719	6.92096E-10	1.03378E-07
ENSMUSG000000037172	E330009J07Rik	900.1727587	-0.777879195	0.126900607	-6.129830357	8.79728E-10	1.23609E-07
ENSMUSG000000017453	Pipox	402.7733967	-1.000465421	0.163424111	-6.121896074	9.24683E-10	1.28834E-07
ENSMUSG000000068747	Sort1	4076.250575	-0.617690395	0.102454269	-6.0289376	1.65041E-09	2.17173E-07
ENSMUSG000000019737	Syne4	34.50557228	-1.563418342	0.260239069	-6.007623486	1.88262E-09	2.43859E-07
ENSMUSG000000031327	Chic1	447.7443779	-0.769996696	0.12865623	-5.984915759	2.16502E-09	2.76123E-07
ENSMUSG000000037736	Limch1	34.88098434	-1.746946228	0.292275731	-5.977048534	2.27217E-09	2.87576E-07
ENSMUSG000000039347	Atp6v0e2	231.1112732	-0.826502041	0.138817293	-5.953883858	2.61853E-09	0.000000324
ENSMUSG000000025574	Tk1	593.0282805	-0.743952008	0.125126982	-5.945576206	2.75486E-09	3.38338E-07
ENSMUSG000000057315	Arhgap24	53.57464194	-1.442394512	0.243543929	-5.922522971	3.1704E-09	3.79629E-07
ENSMUSG000000031093	Dock11	693.9444246	-0.761003615	0.128507561	-5.921858681	3.18323E-09	3.79629E-07
ENSMUSG000000041417	Pik3r1	3299.654894	-0.518795566	0.087623884	-5.920709555	3.20556E-09	3.79629E-07
ENSMUSG000000048373	Fgf1bp1	368.3803467	-1.201808907	0.203539393	-5.904551901	3.53607E-09	4.12873E-07
ENSMUSG000000028480	Glirp2	172.8897097	-1.274693156	0.217850222	-5.851236444	4.87932E-09	5.35756E-07
ENSMUSG000000068854	Hist2h2be	125.5523577	-1.06214635	0.183179482	-5.798391501	6.6954E-09	7.25554E-07
ENSMUSG000000026398	Nr5a2	972.3752797	-0.947023502	0.16464844	-5.751791525	8.83026E-09	9.32521E-07
ENSMUSG000000026961	Lrrc26	187.1388884	-0.906646961	0.158265811	-5.728634329	1.01242E-08	1.05572E-06
ENSMUSG000000019066	Rab3d	653.4598471	-0.722296735	0.126126339	-5.726771588	1.0236E-08	1.0607E-06
ENSMUSG000000031255	Sytl4	87.00853386	-1.055074892	0.187335695	-5.63200138	1.7813E-08	0.000001758
ENSMUSG000000028332	Hemgn	29.11259754	-1.513418086	0.269058637	-5.624863432	1.85655E-08	1.82139E-06
ENSMUSG000000028995	Fam126a	344.9426625	-0.795490533	0.141644558	-5.619340864	1.91687E-08	1.86952E-06
ENSMUSG000000041261	Car8	256.6200461	-1.24203817	0.222271222	-5.58793962	0.000000023	2.20216E-06
ENSMUSG000000067219	Nipal1	912.4256326	-0.660931279	0.119098758	-5.549438874	2.86588E-08	2.67576E-06
ENSMUSG000000021062	Rab15	509.9072027	-0.750163433	0.135514076	-5.535686429	0.000000031	2.87151E-06
ENSMUSG000000029445	Hpd	162.3654646	-1.208576694	0.220170772	-5.489269449	4.036E-08	3.61712E-06
ENSMUSG000000033200	Tpsg1	143.7287035	-1.124594483	0.205658556	-5.468260146	4.54475E-08	3.97245E-06
ENSMUSG000000009545	Kcna1	1733.122023	-0.727555402	0.133057753	-5.467966979	4.55227E-08	3.97245E-06
ENSMUSG000000026828	Galnt5	204.6257313	-1.045728677	0.191383921	-5.464036225	4.65428E-08	4.01361E-06
ENSMUSG000000024665	Fads2	1002.022198	-0.831286354	0.152342866	-5.456680568	4.85118E-08	4.12475E-06
ENSMUSG000000062743	Zfp677	38.71051882	-1.289588443	0.237223214	-5.436181493	5.44345E-08	4.58134E-06
ENSMUSG000000043415	Otd1	19.53116072	-1.57772003	0.291523428	-5.411983665	6.23304E-08	5.19315E-06
ENSMUSG000000027351	Spred1	521.0812245	-0.703885831	0.130047906	-5.412511863	6.21467E-08	5.19315E-06
ENSMUSG000000015189	Casd1	308.0108913	-0.703852591	0.130619263	-5.38858187	0.000000071	5.74362E-06
ENSMUSG000000007613	Tgfb1	572.0768015	-0.553131858	0.102667552	-5.387601488	7.14042E-08	0.000005747
ENSMUSG000000045005	Fzd5	5200.738702	-0.681880401	0.126840524	-5.375887615	7.62063E-08	6.07452E-06
ENSMUSG000000043673	Kcns3	34.0367615	-1.748140994	0.326622251	-5.352179739	8.6901E-08	6.89387E-06
ENSMUSG000000033174	Mgll	33.52702543	-1.499163927	0.280323931	-5.347969842	8.89463E-08	7.02252E-06
ENSMUSG000000039774	Galnt12	624.3546028	-0.824320556	0.155024932	-5.317341829	1.05294E-07	0.000008094
ENSMUSG000000034112	Atp2c2	217.7045294	-0.878041886	0.165307117	-5.311579461	1.08679E-07	8.2656E-06
ENSMUSG000000035561	Aldh1b1	11988.30968	-0.860742019	0.163304614	-5.270775867	1.35848E-07	1.00591E-05
ENSMUSG000000039270	Megf9	232.334675	-0.921334862	0.174864154	-5.268860667	1.37273E-07	1.00679E-05
ENSMUSG000000047412	Zbtb44	816.6600608	-0.566329909	0.107501696	-5.268102094	1.37841E-07	1.00679E-05
ENSMUSG000000025515	Muc2	49641.79405	-0.986445894	0.187292033	-5.266886566	1.38757E-07	1.00903E-05
ENSMUSG000000025887	Casp12	50.49063048	-1.416541021	0.269210897	-5.261826466	1.42631E-07	1.03148E-05
ENSMUSG000000075270	Pde11a	102.5527449	-1.026113237	0.195032654	-5.261238131	1.43089E-07	1.03148E-05
ENSMUSG000000062901	Khlh24	950.6008692	-0.688327048	0.13093567	-5.256986488	1.46435E-07	1.04201E-05
ENSMUSG000000028780	Sema3c	197.6263471	-0.848123088	0.161440647	-5.253466865	1.49263E-07	0.000010576
ENSMUSG000000020186	Csrp2	852.9164818	-0.939531829	0.178897846	-5.251778328	1.50638E-07	0.000010628
ENSMUSG000000021175	Cdca7l	408.7623313	-0.634813043	0.121178431	-5.238663664	1.61744E-07	1.13152E-05
ENSMUSG000000041895	Wip1	190.8992451	-0.711407511	0.135993203	-5.231199034	1.68414E-07	1.17324E-05
ENSMUSG000000074439	Defa5	304.7752821	-1.35027883	0.259554374	-5.202296573	1.96841E-07	1.34305E-05
ENSMUSG000000001604	Tcea3	455.9756667	-0.603073559	0.1495281	-5.194508901	2.05261E-07	1.39477E-05

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ENSMUSG000000031465	Angpt2	38.89713192	-1.36183664	0.26290051	-5.180045636	2.21832E-07	1.47975E-05
ENSMUSG000000033717	Adra2a	222.020115	-1.15881106	0.15110106	-5.22231E-07	1.47975E-05	
ENSMUSG000000065956	Gm14850	3084.665538	-1.293436527	0.250344284	-5.166630957	2.38351E-07	1.57491E-05
ENSMUSG000000009905	Kdsr	716.0093965	-0.643272808	0.125000946	-5.146143527	2.65896E-07	1.74251E-05
ENSMUSG000000024619	Cdx1	1650.599918	-0.657413509	0.128398941	-5.120085152	3.05398E-07	1.98568E-05
ENSMUSG000000024070	Prkd3	208.7864246	-0.836207944	0.163611422	-5.110938674	3.20562E-07	2.05209E-05
ENSMUSG000000026834	Acvr1c	336.9812828	-1.200866809	0.235186419	-5.106021057	0.000000329	2.09809E-05
ENSMUSG000000053897	Slc39a8	349.6075636	-0.819958977	0.160705848	-5.102234833	3.35666E-07	2.12418E-05
ENSMUSG000000042210	Abhd14a	309.6135319	-0.736174915	0.144641272	-5.089660123	3.58706E-07	2.25278E-05
ENSMUSG000000005672	Kit	536.6643026	-0.81563701	0.215617031	-5.075373699	3.86735E-07	2.39256E-05
ENSMUSG000000040618	Pck2	485.1874398	-0.821945779	0.162158508	-5.068779848	4.00374E-07	2.45859E-05
ENSMUSG000000005360	Slc1a3	525.2399454	-0.888531598	0.175354966	-5.06704553	0.000000404	2.47194E-05
ENSMUSG000000037033	Clca3b	8737.29011	-0.993366159	0.197269474	-5.035579704	4.76405E-07	2.83787E-05
ENSMUSG000000039395	Mreg	218.6234743	-0.973327482	0.193307585	-5.035123077	4.77542E-07	2.83787E-05
ENSMUSG000000020788	Atp2a3	3626.651769	-0.797081847	0.158449412	-5.030513122	4.89169E-07	2.89658E-05
ENSMUSG000000045103	Dmd	428.5074907	-0.593976694	0.118177499	-5.026140317	5.0045E-07	2.95283E-05
ENSMUSG000000047773	Ankfn1	11.86469458	-1.637143605	0.326815263	-5.009385394	0.000000546	3.21041E-05
ENSMUSG000000035776	Cd99i2	124.8512221	-1.039722009	0.207839053	-5.002534394	5.65815E-07	3.31492E-05
ENSMUSG000000005893	Nr2c2	1975.807898	-0.422634746	0.084546617	-4.998836886	5.76772E-07	3.36721E-05
ENSMUSG000000027810	Eif2a	952.1575881	-0.53447424	0.107043619	-4.993050904	5.94329E-07	3.44544E-05
ENSMUSG000000024411	Aqp4	528.8502044	-0.869776674	0.174373902	-4.987997987	6.10082E-07	3.51221E-05
ENSMUSG000000032245	Cln6	335.9037503	-0.81764151	0.165119815	-4.951807326	7.35274E-07	4.15345E-05
ENSMUSG000000033066	Gas7	64.58647484	-1.156122522	0.234420597	-4.931829953	8.14628E-07	4.54766E-05
ENSMUSG000000050520	Cldn8	33.08580625	-1.514982701	0.307653451	-4.924315637	8.46561E-07	4.66312E-05
ENSMUSG000000063296	Tmem117	598.6984247	-1.264695264	0.256994648	-4.921095727	8.6061E-07	4.72481E-05
ENSMUSG000000042810	Krba1	225.8515733	-0.888726911	0.180842345	-4.914373974	8.90666E-07	4.84172E-05
ENSMUSG000000050014	Apol10b	86.72374215	-1.293944705	0.263436291	-4.911793661	9.0247E-07	0.000048581
ENSMUSG000000063898	Steap3	174.8921261	-0.81225892	0.165495416	-4.908044818	9.19888E-07	4.93522E-05
ENSMUSG000000017978	Cadps2	670.9751049	-0.549806415	0.11249954	-4.887188134	1.02286E-06	5.45308E-05
ENSMUSG000000022797	Tfrc	5659.138261	-0.809543751	0.165867105	-4.880676923	1.05722E-06	5.60024E-05
ENSMUSG000000030653	Pde2a	267.4711136	-1.196851998	0.245380618	-4.87753274	1.07421E-06	0.000056541
ENSMUSG000000056895	Hist3h2ba	34.56043614	-1.476671285	0.302894708	-4.87519672	0.000001087	5.70331E-05
ENSMUSG000000000037	Scml2	14.95803893	-1.54027382	0.315983664	-4.874423885	1.09126E-06	5.70762E-05
ENSMUSG000000046312	Al464131	469.7344662	-0.637748093	0.130924048	-4.871130278	1.10962E-06	5.78536E-05
ENSMUSG000000059713	Rcan3	215.8283631	-0.924273367	0.189809494	-4.869479109	1.11893E-06	5.79745E-05
ENSMUSG000000042712	Wbp5	375.3388375	-0.855170184	0.175982645	-4.859400689	1.17742E-06	6.02517E-05
ENSMUSG000000099025	Gm27162	47.04451623	-1.274842667	0.262899536	-4.849162868	1.23984E-06	6.32507E-05
ENSMUSG000000044359	Zdry4	101.7401624	-1.41675839	0.292363425	-4.845881078	1.26051E-06	6.39121E-05
ENSMUSG0000000030471	Zdhc13	701.9558422	-0.469126633	0.096991476	-4.836782096	1.31958E-06	6.62989E-05
ENSMUSG000000045896	Paip2b	365.2504637	-0.790834162	0.163561024	-4.835101573	1.33078E-06	6.66594E-05
ENSMUSG000000024511	Rab27b	448.9216852	-0.818833311	0.169575943	-4.828711538	1.37419E-06	6.80179E-05
ENSMUSG000000056220	Pla2g4a	216.6717089	-0.925644503	0.191982398	-4.821507131	1.42478E-06	6.98899E-05
ENSMUSG000000041695	Kcnj2	220.7503409	-0.86709045	0.179818548	-4.822030096	0.000001421	6.98899E-05
ENSMUSG000000034522	Zfp395	185.8643456	-0.997937154	0.207104915	-4.818510245	1.44634E-06	7.05952E-05
ENSMUSG000000028173	Wls	541.2414496	-0.793267503	0.164635464	-4.818326999	1.44767E-06	7.05952E-05
ENSMUSG000000079113	Gm7861	1232.171373	-1.462429656	0.304894172	-4.796515615	1.61449E-06	7.80417E-05
ENSMUSG000000026411	Tmem9	56.81592662	-1.008905612	0.210470344	-4.793576112	1.63834E-06	7.88265E-05
ENSMUSG000000055748	Gsdmc4	2011.168993	-1.522643239	0.317763562	-4.791746169	1.65336E-06	7.91385E-05
ENSMUSG000000035067	Xkr6	53.94498427	-1.257513832	0.262543494	-4.789735274	0.00000167	7.95657E-05
ENSMUSG000000078653	Cntd1	34.0791553	-1.238885954	0.259325584	-4.777337948	1.77631E-06	8.36683E-05
ENSMUSG000000012350	Ehf	2014.697976	-0.789782015	0.165832644	-4.762524409	1.91186E-06	8.87917E-05
ENSMUSG000000022533	Atp13a3	3794.266693	-0.586769862	0.123467774	-4.752413073	0.00000201	9.23167E-05
ENSMUSG000000103656	Gm37205	44.14690758	-1.106285215	0.232991433	-4.748179797	2.05256E-06	9.37503E-05
ENSMUSG000000022708	Zbtb20	711.9840523	-0.78638681	0.166136023	-4.733391328	0.000002208	0.00009921
ENSMUSG000000023963	Cyp39a1	142.2025435	-0.888643991	0.187812921	-4.731538093	2.22825E-06	9.98497E-05
ENSMUSG000000054169	Ceacam10	176.8149899	-1.549488734	0.32759939	-4.729827903	2.2471E-06	0.000100423
ENSMUSG000000060070	Defa26	465.4879685	-1.473790297	0.311744458	-4.727558935	2.27235E-06	0.000101278
ENSMUSG000000066894	Vsig10	1514.359493	-0.632883287	0.133954571	-4.724611352	2.30556E-06	0.000102483
ENSMUSG000000044156	Hepacam2	700.9346535	-0.702729119	0.149002491	-4.716223967	2.40262E-06	0.000106228
ENSMUSG000000031391	L1cam	1417.621356	-0.875370951	0.185635108	-4.715546334	2.41063E-06	0.000106299
ENSMUSG000000059791	Nrm	116.4574102	-0.916185833	0.194421637	-4.712365602	2.44858E-06	0.000107634
ENSMUSG000000046020	Pofut1	974.4996776	-0.47441801	0.100684567	-4.711923832	2.45389E-06	0.000107634
ENSMUSG000000016382	Pls3	71.66546779	-1.14055013	0.242409459	-4.705076351	2.53771E-06	0.000107746
ENSMUSG000000028832	Stmn1	1275.785062	-0.736753985	0.156611512	-4.704341177	2.54687E-06	0.000110832
ENSMUSG000000038807	Rap1gap2	1120.550013	-0.559870807	0.119207551	-4.696605228	2.64521E-06	0.00011481
ENSMUSG000000074447	Defa21	3712.159788	-1.452797196	0.309416298	-4.695283359	2.66237E-06	0.000115254
ENSMUSG000000050627	Gpd1l	1880.660205	-0.405601356	0.086416218	-4.693579114	2.68466E-06	0.000115916
ENSMUSG000000046318	Ccbe1	33.41873036	-1.251223615	0.266694495	-4.691598955	2.71078E-06	0.000116437
ENSMUSG000000017707	Serinc3	11476.42725	-0.522168507	0.111296253	-4.69169889	2.70946E-06	0.000116437
ENSMUSG000000024597	Slc12a2	6950.564359	-0.833485397	0.178502679	-4.669315886	0.000003022	0.000126849
ENSMUSG000000030214	Plbd1	1803.622698	-0.685702299	0.146850337	-4.669395472	3.02087E-06	0.000126849
ENSMUSG000000036904	Fzd8	27.06707998	-1.462828185	0.313462218	-4.666681035	0.000003061	0.000127839
ENSMUSG000000000278	Scpep1	523.5002022	-0.735368287	0.158327928	-4.644589835	3.40753E-06	0.00014089
ENSMUSG000000029587	Zfp12	143.0558187	-0.776175481	0.167318831	-4.638900944	3.50267E-06	0.000143748
ENSMUSG000000029782	Tmem209	350.206215	-0.634740133	0.138651776	-4.577944498	4.69567E-06	0.000184927
ENSMUSG000000027230	Creb3l1	244.944146	-0.819725858	0.179214566	-4.573991247	4.7852E-06	0.000188006
ENSMUSG000000042271	Nxt2	370.2694069	-0.630600844	0.13796022	-4.570888951	4.8566E-06	0.00019036
ENSMUSG000000074437	Defa-rs1	2049.068817	-1.168346824	0.255642117	-4.570243888	4.87157E-06	0.000190497
ENSMUSG000000062127	Cttnbp2nl	460.6723162	-0.56068157	0.122996268	-4.558525049	5.15141E-06	0.000200024
ENSMUSG000000087060	Eldr	161.6672895	-0.744507182	0.163481695	-4.554070602	5.26177E-06	0.000203832
ENSMUSG000000034218	Atm	1018.76197	-0.599581733	0.131801276	-4.549134517	5.3867E-06	0.000207701
ENSMUSG000000041577	Prep1	165.9647408	-0.946952933	0.208450685	-4.54281516	5.55079E-06	0.000212545
ENSMUSG000000010253	D930036K23Rik	54.78856681	-1.018194634	0.224331153	-4.53880176	5.65748E-06	0.000216131
ENSMUSG000000056293	Gsdmc2	1292.238439	-1.42081859	0.313191529	-4.536580525	5.71737E-06	0.000216895
ENSMUSG000000026796	Fam129b	775.2905378	-0.621520888	0.136977723	-4.537401546	5.69516E-06	0.000216895
ENSMUSG000000038209	Itln1	19667.37621	-1.073320106	0.236840947	-4.531818173	5.84782E-06	0.000219857
ENSMUSG000000015653	Steap2	346.8588954	-0.553384697	0.122269522	-4.525941429	6.01272E-06	0.000224529
ENSMUSG000000024151	Msh2	598.4288197	-0.599284798	0.132450133	-4.524606984	6.05078E-06	0.000225443
ENSMUSG000000041126	H2afv	1422.947397	-0.535529237	0.118394254	-4.523270511	6.08913E-06	0.000226363
ENSMUSG000000044352	Sowaha	764.2526544	-0.710963488	0.157215421	-4.522224888	6.1193E-06	0.000226469
ENSMUSG000000022314	Rad21	3113.743491	-0.413852037	0.091510703	-4.522444058	0.000006113	0.000226469
ENSMUSG000000024817	Uhrf2	782.4112296	-0.439264225	0.234420597	-4.517251577	6.26475E-06	0.000230821



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ENSMUSG000000035967	Ddx26b	76.98093897	-0.881810901	0.195271523	-4.515819242	6.30724E-06	0.000231872
ENSMUSG000000039529	Atp8b1	13740.7185	-0.07168585	0.01422785	-4.422142278	6.43944E-06	0.000235686
ENSMUSG000000024120	Lrrpprc	2991.470455	-0.415646263	0.092162212	-4.507967559	6.54516E-06	0.000238702
ENSMUSG000000020883	Fbxl20	601.651573	-0.475591195	0.105549587	-4.505855573	6.6106E-06	0.000240359
ENSMUSG000000097354	2310001H17Rik	294.1438956	-0.569019795	0.126336756	-4.503992443	6.66886E-06	0.000241947
ENSMUSG000000044674	Fzd1	92.85473342	-0.931846867	0.207747934	-4.485468765	7.27538E-06	0.000261115
ENSMUSG000000026730	Pter	163.9048915	-0.782444161	0.174440404	-4.485452592	7.27593E-06	0.000261115
ENSMUSG000000032278	Paqr5	55.18058112	-1.217703514	0.271541925	-4.484403335	7.31182E-06	0.000261272
ENSMUSG000000032253	Phip	1866.821526	-0.42915855	0.095754526	-4.48227839	0.000007385	0.00026332
ENSMUSG000000039145	Camk1d	2112.878818	-0.551993638	0.123421838	-4.472414669	7.73413E-06	0.000274586
ENSMUSG000000026585	Kifap3	170.5284049	-0.611305031	0.136986712	-4.46251334	8.10039E-06	0.000286363
ENSMUSG000000021830	Txndc16	248.2003502	-0.715712032	0.160520259	-4.458702209	8.24574E-06	0.000290264
ENSMUSG000000035696	Rnf38	835.3685923	-0.485104918	0.108869464	-4.455840044	8.35653E-06	0.000293541
ENSMUSG000000074653	Lrrc31	393.2411195	-0.745358313	0.167503809	-4.449799192	8.59506E-06	0.000301281
ENSMUSG000000024085	Man2a1	3399.41554	-0.363588451	0.081938053	-4.4373577	0.000009107	0.000315887
ENSMUSG000000000861	Bcl11a	296.1398616	-0.630309322	0.142262586	-4.430604969	9.39691E-06	0.000324585
ENSMUSG000000044231	Nhlrc1	72.03551121	-0.8925762	0.201534274	-4.428905235	9.47126E-06	0.000325121
ENSMUSG000000043668	Tox3	199.496979	-0.770060424	0.173943343	-4.427076136	9.5519E-06	0.000327011
ENSMUSG000000026489	Adck3	768.6343287	-0.75976629	0.171792027	-4.422593427	9.75232E-06	0.000331339
ENSMUSG000000028749	Pla2g2f	157.6341146	-1.060348677	0.239854394	-4.420801548	9.83355E-06	0.000332759
ENSMUSG000000001761	Smo	219.8410338	-0.836122278	0.189243588	-4.418233068	9.95111E-06	0.000333987
ENSMUSG000000024974	Smc3	1206.782905	-0.438844462	0.09930168	-4.419305503	9.90186E-06	0.000333987
ENSMUSG000000074446	Defa23	3661.530987	-1.334099622	0.302035992	-4.417022003	0.000010007	0.000335184
ENSMUSG000000073043	Atoh1	319.6691382	-0.835318094	0.189951113	-4.397542519	1.09483E-05	0.000359453
ENSMUSG000000021696	Elovl7	1295.505031	-0.511147564	0.116259039	-4.396626418	1.09946E-05	0.000360259
ENSMUSG000000052911	Lamb2	55.7109499	-0.972349018	0.221199241	-4.395806309	1.10362E-05	0.000360909
ENSMUSG000000000594	Gm2a	196.6829135	-0.712479975	0.162160688	-4.393666445	1.11455E-05	0.000363049
ENSMUSG000000038116	Phf20	239.3167346	-0.559940884	0.127555487	-4.389782796	1.13464E-05	0.000367428
ENSMUSG000000090115	Usp49	214.8221018	-0.668227098	0.15259209	-4.379172582	1.19131E-05	0.000384278
ENSMUSG000000033863	Klf9	634.5031261	-0.442140271	0.101222374	-4.368009292	1.25384E-05	0.000401326
ENSMUSG000000021485	Mxd3	55.96692395	-1.011151406	0.231969132	-4.358991213	1.30663E-05	0.000415815
ENSMUSG000000024063	Lbh	482.8489425	-0.910340445	0.208950792	-4.356721683	1.32025E-05	0.000419344
ENSMUSG000000021646	Mccc2	416.0803768	-0.550187424	0.126822064	-4.338262657	1.43613E-05	0.000451824
ENSMUSG00000003031	Cdkn1b	1012.393345	-0.37520334	0.08654445	-4.335383024	1.45507E-05	0.000454554
ENSMUSG000000028023	Pitx2	263.5789799	-0.636216525	0.146966785	-4.328981711	0.00001498	0.000462512
ENSMUSG000000069495	Epc2	745.0625786	-0.47050833	0.108756264	-4.32626421	1.51659E-05	0.000466515
ENSMUSG000000032411	Tfdp2	1529.994475	-0.514087614	0.119188733	-4.313223246	1.60892E-05	0.000492174
ENSMUSG000000018672	Copx2	23.38386641	-1.258745755	0.292019934	-4.310478865	1.62901E-05	0.00049649
ENSMUSG000000095066	Defa20	5216.51504	-1.387892981	0.322038466	-4.309711807	1.63467E-05	0.000497301
ENSMUSG000000058655	Eif4b	7005.482919	-0.494064914	0.114876977	-4.300817514	1.70169E-05	0.000512052
ENSMUSG000000030934	Oat	17229.74084	-0.710943113	0.165336851	-4.299967676	1.70823E-05	0.000513088
ENSMUSG000000020451	Limk2	2052.997638	-0.533567161	0.124135789	-4.298254091	1.72149E-05	0.000516135
ENSMUSG000000019122	Ccl9	172.9497362	-0.869082224	0.202311691	-4.295758776	1.74097E-05	0.00052051
ENSMUSG000000022261	Sdc2	112.9128943	-0.911642647	0.212365203	-4.292806144	1.76429E-05	0.000525169
ENSMUSG000000043501	Lgals2	10522.51259	-0.630068153	0.14685303	-4.2904675	1.78297E-05	0.000528832
ENSMUSG000000041688	Amot	974.7335754	-0.478735488	0.111676298	-4.286813728	1.81254E-05	0.000535685
ENSMUSG000000033900	Map9	7.521102993	-1.403669737	0.327582874	-4.284930156	1.82797E-05	0.000539283
ENSMUSG000000048330	Ric3	13.67834855	-1.34052169	0.312937488	-4.283672429	1.83834E-05	0.000541378
ENSMUSG000000038400	Pmepa1	186.8365231	-0.657728442	0.153844806	-4.27527232	1.90904E-05	0.000557106
ENSMUSG000000060615	Ang4	4087.123942	-1.400873635	0.327748028	-4.274239702	1.91791E-05	0.000557875
ENSMUSG000000038991	Txndc5	3268.580578	-0.527139207	0.12366854	-4.262516605	2.02137E-05	0.0005582859
ENSMUSG000000041594	Tmtc4	474.6157794	-0.501280799	0.117815379	-4.254799378	2.09237E-05	0.000599161
ENSMUSG000000074443	Defa22	3733.659115	-1.351023699	0.317936591	-4.249349521	2.14392E-05	0.000612866
ENSMUSG000000030526	Prodh	968.5757534	-0.524745646	0.123531331	-4.24787496	2.15808E-05	0.000615851
ENSMUSG000000038702	Dsel	26.69284131	-1.229450118	0.289609344	-4.245201828	2.18397E-05	0.000621101
ENSMUSG000000046410	Kcnk6	318.3638841	-0.654874142	0.154390432	-4.241675699	2.21857E-05	0.000628785
ENSMUSG000000023873	1700010I14Rik	12.85493336	-1.328495039	0.313241016	-4.24112735	0.00002224	0.000629248
ENSMUSG000000037649	H2-DMa	763.6332591	-0.730149607	0.172190056	-4.240370341	2.23151E-05	0.000630121
ENSMUSG000000036745	Tllf7	48.17624201	-1.0649987	0.251241679	-4.238941181	2.24576E-05	0.00063217
ENSMUSG000000063903	Klk1	491.8409658	-0.956914798	0.225939315	-4.235273515	2.28274E-05	0.000641488
ENSMUSG000000043391	2510009E07Rik	70.74145305	-1.056283959	0.250693536	-4.213447121	2.51502E-05	0.000700825
ENSMUSG000000022949	Clic6	765.0563958	-0.824282449	0.19562118	-4.213666675	2.51258E-05	0.000700825
ENSMUSG000000006289	Osgep	340.5672262	-0.679458391	0.16124718	-4.213769148	2.51144E-05	0.000700825
ENSMUSG000000040209	Zfp704	1188.311764	-0.675217205	0.1602274	-4.214118212	2.50756E-05	0.000700825
ENSMUSG000000060208	Defa17	1577.537114	-1.354192042	0.32154144	-4.211563032	0.000025361	0.000704251
ENSMUSG000000024535	Snx24	129.2155549	-0.7711197539	0.168881974	-4.211210487	2.54006E-05	0.000704251
ENSMUSG000000086513	9130208D14Rik	11247.94896	-0.680207899	0.161515016	-4.21142204	2.53768E-05	0.000704251
ENSMUSG000000069305	Hist1h4n	767.088864	-0.553706154	0.131585321	-4.207962934	2.57683E-05	0.000713253
ENSMUSG0000000002265	Peg3	41.69780805	-1.093159257	0.259808653	-4.207555232	2.58148E-05	0.00071335
ENSMUSG000000037824	Tspan14	716.8814607	-0.427458057	0.101661156	-4.204733393	0.000026139	0.000718714
ENSMUSG000000062867	Impdh2	1601.806311	-0.645245894	0.153560995	-4.201886648	0.00002647	0.000726609
ENSMUSG000000060402	Cst8	8.67537493	-1.372742532	0.326824363	-4.200245409	2.66626E-05	0.000729481
ENSMUSG000000029472	Anapc5	2216.083727	-0.473255159	0.112722117	-4.198423267	0.000026878	0.000734163
ENSMUSG000000042851	Zc3h6	115.0658857	-0.918788922	0.218864807	-4.197974697	2.69313E-05	0.000734409
ENSMUSG000000032040	Dcps	199.0397401	-0.719624825	0.171558351	-4.19463593	0.000027331	0.000744086
ENSMUSG000000102411	Gm36936	77.2105069	-0.766541857	0.18276203	-4.194207399	2.73827E-05	0.000744272
ENSMUSG000000030849	Fgfr2	336.7251901	-0.695472271	0.16592892	-4.191386706	2.77255E-05	0.000751125
ENSMUSG000000028542	Slc6a9	161.4617527	-0.81233407	0.193949811	-4.188372581	2.80962E-05	0.000758689
ENSMUSG000000034687	Fras1	229.1146637	-1.170849014	0.279788757	-4.184760764	2.85467E-05	0.000769599
ENSMUSG000000029134	Plb1	3377.267026	-1.366910209	0.326930397	-4.181043486	2.90174E-05	0.000779755
ENSMUSG000000064213	Defa24	36170.07884	-1.284192706	0.307378689	-4.177884642	2.94233E-05	0.000786836
ENSMUSG000000031441	Atp11a	174.0956849	-0.624414779	0.149713797	-4.170723026	3.03635E-05	0.000806773
ENSMUSG000000030207	Fam234b	1673.999913	-0.484165119	0.116084592	-4.170795707	3.03538E-05	0.000806773
ENSMUSG000000005447	Pafah1b3	438.4159811	-0.50064005	0.120337342	-4.160305036	3.17823E-05	0.000836429
ENSMUSG000000039405	Prss23	596.904012	-1.10282348	0.265241706	-4.157805713	3.21319E-05	0.000842954
ENSMUSG000000098557	Kctd12	1024.154013	-1.059699971	0.255226788	-4.15199352	3.29592E-05	0.000859218
ENSMUSG000000049047	Armxc3	63.93894135	-1.005931888	0.242308396	-4.151452873	3.30371E-05	0.000859899
ENSMUSG000000021614	Vcan	20.74991032	-1.189406742	0.286698233	-4.148636468	3.34461E-05	0.00086782
ENSMUSG000000047604	Frat2	730.4721116	-0.476213388	0.114805101	-4.14801594	3.35369E-05	0.000868816
ENSMUSG000000037279	Ovol2	172.5323793	-0.673705633	0.162452564	-4.147091406	3.36726E-05	0.000870969
ENSMUSG000000032500	Dcll3	47.64393536	-1.226737144	0.295988662	-4.144540996	3.40495E-05	0.000879347
ENSMUSG000000063838	Cdc42ep5	1006.869364	-0.402214796	0.295988662	-4.138493228	3.49594E-05	0.000901442

# ACCEPTED MANUSCRIPT

## Downregulated results\_001-RNase

ENSMUSG000000028479	Gne	1252.981195	-0.579526601	0.140325243	-4.129881314	3.62951E-05	0.00093298
ENSMUSG000000021340	Gpld1	373.086515	-0.501023196	0.123673737	-4.124749603	3.67606E-05	0.000941289
ENSMUSG000000021377	Dek	1426.668716	-0.510123196	0.123673737	-4.124749603	3.71138E-05	0.000948147
ENSMUSG000000035493	Tgfb1	3996.178904	-0.566605573	0.137487336	-4.121147377	0.000037699	0.000960138
ENSMUSG000000027306	Nusap1	681.0720036	-0.703260612	0.171119977	-4.10975168	3.96085E-05	0.001004142
ENSMUSG000000038481	Cdk19	425.8637158	-0.515246805	0.125450682	-4.107166235	4.00543E-05	0.001013894
ENSMUSG000000044468	Fam46c	512.6521072	-0.777562996	0.189438275	-4.104571769	4.05065E-05	0.001023776
ENSMUSG000000021969	Zdhhc20	1086.268423	-0.467457132	0.113907129	-4.103844386	4.06341E-05	0.001025439
ENSMUSG000000021583	Erap1	2991.702281	-0.444147622	0.108304656	-4.100909776	4.11529E-05	0.001033811
ENSMUSG000000030717	Nupr1	268.3166918	-1.062058689	0.259020488	-4.100288345	4.12636E-05	0.001035023
ENSMUSG000000018415	Gid4	701.9674747	-0.556142495	0.135941873	-4.091031566	4.29459E-05	0.001070741
ENSMUSG000000001576	Ergic1	938.0520162	-0.550540223	0.134781188	-4.084696336	4.41345E-05	0.001097076
ENSMUSG000000005566	Trim28	2900.062243	-0.475370038	0.116521157	-4.079688608	4.50961E-05	0.001117628
ENSMUSG000000050199	Lgr4	3500.574635	-0.49602702	0.121639439	-4.077847006	4.54547E-05	0.001123518
ENSMUSG000000050930	Map10	35.57871749	-1.048372794	0.257326275	-4.074099296	4.61928E-05	0.001132953
ENSMUSG0000000049539	Hist1h1a	1463.339113	-0.63930195	0.156990828	-4.072224835	4.65662E-05	0.001138743
ENSMUSG000000001247	Lsr	3366.842744	-0.2888715	0.070935709	-4.072300193	4.65511E-05	0.001138743
ENSMUSG000000051579	Tceal8	18.56944556	-1.332049399	0.327336145	-4.069362396	0.000047142	0.00114326
ENSMUSG000000039943	Plcb4	92.04540113	-0.893262984	0.219497038	-4.069590148	4.70959E-05	0.00114326
ENSMUSG000000096210	H1f0	4347.001427	-0.525715229	0.12919216	-4.069250265	4.71647E-05	0.00114326
ENSMUSG000000051379	Frlt3	529.1964321	-0.660839272	0.162687191	-4.062023993	4.86491E-05	0.001174093
ENSMUSG000000033411	Ctdspl2	572.1190722	-0.487985033	0.12020718	-4.059533152	4.91709E-05	0.001181528
ENSMUSG000000042129	Rassf4	635.8380482	-0.692876229	0.1707254	-4.058424991	4.94048E-05	0.001185085
ENSMUSG000000066877	Nck2	1191.740001	-0.379948876	0.093626013	-4.058155043	4.94619E-05	0.001185085
ENSMUSG000000050071	Bex1	10.15657902	-1.295189848	0.319399159	-4.055082205	5.01167E-05	0.001195589
ENSMUSG000000031073	Fgf15	23.27992331	-1.315207411	0.324474521	-4.053345722	5.04903E-05	0.001202772
ENSMUSG000000037031	Tspan15	2293.861452	-0.428118527	0.10566567	-4.051633124	5.08614E-05	0.00120814
ENSMUSG000000031775	Plp1	269.5378556	-0.605370808	0.149586191	-4.046969858	5.18849E-05	0.001219318
ENSMUSG000000000805	Car4	1900.906549	-1.007408299	0.249453906	-4.038454703	5.38045E-05	0.00125822
ENSMUSG000000022419	Deptor	1705.340966	-0.765911407	0.18991952	-4.032820891	5.51113E-05	0.00128155
ENSMUSG000000029168	Dpysl5	46.35103132	-1.219099637	0.302381155	-4.031665388	0.000055383	0.001286065
ENSMUSG000000022358	Fbxo32	143.5389532	-0.967651091	0.240092245	-4.03033047	5.56985E-05	0.001288298
ENSMUSG000000049321	Zfp2	47.20124992	-0.876376499	0.21766634	-4.026238039	5.66763E-05	0.001306945
ENSMUSG000000097164	Cep83os	110.5788712	-0.78006308	0.19386626	-4.023717159	5.72866E-05	0.001319183
ENSMUSG000000078851	Hist3h2a	66.41162888	-0.758411884	0.188569838	-4.021915127	5.77269E-05	0.001325639
ENSMUSG000000033022	Cdo1	289.6133106	-0.731633435	0.18206225	-4.018589434	5.85476E-05	0.001340772
ENSMUSG000000055827	Gsdmc3	491.1441118	-1.218031367	0.30324809	-4.01661678	5.90396E-05	0.001344611
ENSMUSG000000048277	Syngn2	1700.810488	-0.477441445	0.118859469	-4.016856631	5.89796E-05	0.001344611
ENSMUSG0000000010066	Cacna2d2	18.42791019	-1.217757367	0.303772905	-4.008775454	6.10344E-05	0.001384337
ENSMUSG000000031146	Plp2	459.5932671	-0.747613512	0.186565483	-4.007244524	6.14313E-05	0.001391435
ENSMUSG000000021337	Scgn	23.33232107	-1.121137661	0.280233253	-4.000730275	6.31473E-05	0.001416756
ENSMUSG000000021365	Nedd9	1266.418873	-0.380640115	0.095320492	-3.993266383	6.51693E-05	0.001458174
ENSMUSG000000026494	Kif26b	56.52424109	-0.89857908	0.225099392	-3.991921409	6.55401E-05	0.001463635
ENSMUSG000000035506	Slc12a8	1072.676485	-0.582112003	0.145951901	-3.988382474	6.65253E-05	0.00147656
ENSMUSG000000049606	Zfp644	1207.904238	-0.389790455	0.097792912	-3.985876346	6.72315E-05	0.001490239
ENSMUSG000000040728	Esrp1	1974.884159	-0.393868112	0.098929777	-3.981289818	6.85423E-05	0.001513225
ENSMUSG000000032773	Chrm1	54.84930952	-1.027280035	0.258064547	-3.980709656	6.87098E-05	0.001514906
ENSMUSG000000032086	Bace1	113.4251838	-0.772428797	0.194463567	-3.972100311	7.12417E-05	0.001560353
ENSMUSG000000041741	Pde3a	1938.035556	-0.465930068	0.117363482	-3.969974828	7.18802E-05	0.001564811
ENSMUSG000000024165	Hn1l	1170.934626	-0.427919541	0.107782737	-3.970204807	7.18109E-05	0.001564811
ENSMUSG000000031221	Igfbp1	978.0921893	-0.417871189	0.105236926	-3.970765819	0.000071642	0.001564811
ENSMUSG000000022231	Sema5a	1852.557036	-0.90071944	0.226943915	-3.968907643	7.22029E-05	0.001568969
ENSMUSG000000010175	Prox1	57.15535548	-0.9528334	0.240200932	-3.966818084	7.28385E-05	0.001579655
ENSMUSG000000027165	B230118H07Rik	52.38171027	-0.937682843	0.236455447	-3.965579368	7.32179E-05	0.001584794
ENSMUSG000000021638	Ocln	3387.682966	-0.329395145	0.083148414	-3.961532499	7.44702E-05	0.001603528
ENSMUSG000000027737	Slc7a11	30.95306287	-1.223032945	0.309166336	-3.955905935	7.62452E-05	0.001637493
ENSMUSG000000028795	Ccdc28b	37.0359569	-1.051995125	0.2659546	-3.955544003	7.63607E-05	0.001637853
ENSMUSG000000041560	Gltscr2	1982.014264	-0.451113486	0.114158341	-3.95164717	7.76151E-05	0.001662608
ENSMUSG000000074441	Gm15292	302.9037544	-1.2941615	0.327579021	-3.950684924	7.79279E-05	0.001667058
ENSMUSG0000000100954	Gm10138	40.71395107	-0.908209878	0.229946073	-3.949664667	7.82608E-05	0.001669966
ENSMUSG000000001098	Kctd10	1432.230603	-0.441918363	0.111934269	-3.948016693	7.88013E-05	0.001679339
ENSMUSG000000045284	Dcaf12l1	5.800410151	-1.273272707	0.32262627	-3.946587193	7.92731E-05	0.001685061
ENSMUSG000000055737	Ghr	210.6785889	-0.932923921	0.236799531	-3.939720306	8.15767E-05	0.001727383
ENSMUSG000000039985	Fam60a	571.5814837	-0.527182643	0.133910614	-3.936824919	8.25668E-05	0.001743895
ENSMUSG000000039063	Echdc3	31.99760321	-1.016672747	0.258473142	-3.933378682	8.37601E-05	0.001762364
ENSMUSG000000029710	Ephb4	1704.860102	-0.559605184	0.142338246	-3.931516661	8.44116E-05	0.001769336
ENSMUSG000000036805	Noxa1	321.6986759	-0.800694988	0.203839101	-3.92807359	0.000085629	0.001788072
ENSMUSG000000026360	Rgs2	310.303028	-0.679901079	0.173323758	-3.922722932	8.7538E-05	0.001819101
ENSMUSG000000028572	Hook1	4890.888816	-0.277607722	0.070785913	-3.921793338	8.78924E-05	0.001823849
ENSMUSG000000016559	H3f3b	8178.053329	-0.426395963	0.108822354	-3.918275497	8.91847E-05	0.001846046
ENSMUSG000000022408	Fam83f	572.3473354	-0.571645219	0.14591103	-3.917765625	8.93735E-05	0.001847648
ENSMUSG000000023505	Cdca3	750.3592993	-0.546142346	0.139474858	-3.915704632	9.01406E-05	0.001858869
ENSMUSG0000000102758	Naaladl2	50.06313083	-1.046391528	0.267983829	-3.904681609	9.43495E-05	0.001938433
ENSMUSG000000026618	Iars2	1552.519104	-0.475901826	0.121894783	-3.904201766	9.45369E-05	0.001939878
ENSMUSG000000040929	Rfx3	266.8219307	-0.466590457	0.119578255	-3.901967433	0.000095414	0.001955456
ENSMUSG000000028414	Fktn	407.4042837	-0.480513158	0.123241081	-3.898969021	9.66031E-05	0.001972512
ENSMUSG000000021193	Pitrm1	608.7244654	-0.534220743	0.137219441	-3.89318555	9.89364E-05	0.00201767
ENSMUSG000000028551	Cdkn2c	254.5860016	-0.654903396	0.168413881	-3.88865449	0.000100802	0.002044473
ENSMUSG000000034724	Cnot6l	1215.900435	-0.405914853	0.104388645	-3.888496236	0.000100867	0.002044473
ENSMUSG000000027177	Hipk3	1739.004822	-0.30719808	0.079019264	-3.887635321	0.000101226	0.002044677
ENSMUSG000000029247	Paics	665.0199604	-0.714712925	0.184007835	-3.884143992	0.000102691	0.002063779
ENSMUSG000000034353	Ramp1	121.5576983	-0.904848088	0.233000958	-3.883452215	0.000102984	0.002067156
ENSMUSG000000027993	Trim2	4450.52186	-0.325229421	0.083840418	-3.879148372	0.000104823	0.002096456
ENSMUSG000000027654	Fam83d	204.4017627	-0.575017397	0.148244521	-3.878844172	0.000104954	0.002096555
ENSMUSG0000000103041	Gm37305	134.5702524	-0.628359602	0.162050973	-3.877542926	0.000105517	0.002105255
ENSMUSG000000034349	Smc4	1861.027427	-0.361177885	0.093394323	-3.867235977	0.000110076	0.002183084
ENSMUSG000000023914	Mep1a	3767.776242	-0.792235053	0.204901544	-3.866418173	0.000110446	0.002187797
ENSMUSG000000009628	Tex15	8.315441117	-1.235177786	0.319608834	-3.864654948	0.000111246	0.00219706
ENSMUSG000000031358	Msl3	556.0055953	-0.358756568	0.092833554	-3.864513981	0.000111311	0.00219706
ENSMUSG000000024431	Nr3c1	4561.260891	-0.343971072	0.089015137	-3.864186293	0.00011146	0.002197395
ENSMUSG000000051495	Irf2bp2	3093.816582	-0.47061729	0.121877481	-3.861396592	0.000112741	0.002220002
ENSMUSG000000025665	Rps6ka6	77.26734449	-0.863933378	0.121877481	-3.86054001	0.000113137	0.00222252

ENSMUSG00000025701	Alox5	101.6048853	-1.193169253	0.309127203	-3.859800243	0.00011348	0.00222662
ENSMUSG00000108591	RP23-60P18.13	50.7593000	-0.211922175	0.211922175	-3.859800243	0.000114237	0.002238819
ENSMUSG00000028327	Straf6l	325.4371379	-0.741528972	0.192281837	-3.856469143	0.000115037	0.002251838
ENSMUSG000000051615	Rap2a	335.6341251	-0.671217662	0.174644014	-3.843347655	0.000121367	0.002359051
ENSMUSG000000029781	Fkbp9	65.57502077	-0.952289273	0.248126962	-3.837911313	0.000124085	0.00240561
ENSMUSG000000030421	Uri1	489.1187094	-0.397129635	0.103481472	-3.837688324	0.000124198	0.00240561
ENSMUSG000000022462	Slc38a2	1800.1798	-0.493613878	0.128835488	-3.831350251	0.000127442	0.002462689
ENSMUSG000000031981	Capn9	271.4657992	-0.651321203	0.170212676	-3.826514082	0.000129971	0.002502804
ENSMUSG000000031700	Gpt2	156.9821638	-0.882424094	0.23096078	-3.820666408	0.000133092	0.002545165
ENSMUSG000000069814	E130309D14Rik	26.44466817	-1.103050544	0.288843252	-3.818855163	0.000134072	0.002552148
ENSMUSG000000025780	Itih5	233.9210515	-0.802491271	0.210124404	-3.819124546	0.000133926	0.002552148
ENSMUSG000000024232	Bambi	148.6281662	-0.877342124	0.230098417	-3.812899434	0.000137346	0.002608473
ENSMUSG000000097789	Gm2115	16.33414	-1.222732061	0.321804648	-3.799609691	0.000144924	0.002730503
ENSMUSG000000040327	Cul9	76.10328804	-0.867201262	0.228399476	-3.796861873	0.000146539	0.002751555
ENSMUSG000000031754	Nudt21	554.5394253	-0.557894698	0.146992514	-3.795395315	0.000147408	0.002764741
ENSMUSG000000021460	Auh	489.0750695	-0.409933225	0.108036437	-3.794397845	0.000148002	0.002769612
ENSMUSG000000036863	Syde2	891.541465	-0.448680975	0.118304304	-3.792600601	0.000149078	0.002786596
ENSMUSG000000042460	C1galt1	1933.613984	-0.414755251	0.109517232	-3.787123201	0.000152402	0.002835935
ENSMUSG000000024610	Cd74	17150.20628	-0.74475076	0.197021902	-3.780040448	0.000156803	0.002911301
ENSMUSG000000026643	Nmt2	472.7720719	-0.44618226	0.118202374	-3.774731808	0.00016018	0.002967355
ENSMUSG000000066324	Impad1	2449.15933	-0.412224404	0.109326185	-3.770591691	0.000162861	0.003003116
ENSMUSG000000036339	Tmem260	546.8961852	-0.381030785	0.101059676	-3.770354322	0.000163016	0.003003116
ENSMUSG000000060487	Samd5	88.85694545	-1.000486679	0.265524004	-3.767970746	0.00016458	0.003028564
ENSMUSG000000036478	Btg1	2776.069282	-0.336268352	0.089439014	-3.759750205	0.000170083	0.003109127
ENSMUSG000000048612	Myof	269.6833042	-0.564855443	0.150260011	-3.75918676	0.000170467	0.003112704
ENSMUSG000000069265	Hist1h3a	1045.27884	-0.77407993	0.206171365	-3.754546268	0.000173656	0.003160497
ENSMUSG000000040855	Reps2	1056.972371	-0.417971728	0.111419688	-3.751327406	0.000175901	0.003197846
ENSMUSG000000031320	Rps4x	8268.885611	-0.593240594	0.158212306	-3.749648875	0.000177082	0.003212282
ENSMUSG000000025584	Pde8a	57.71341842	-0.870276633	0.232266224	-3.746892751	0.000179039	0.003237143
ENSMUSG000000046179	E2f8	491.7356579	-0.591049837	0.157867024	-3.743972747	0.000181133	0.003267889
ENSMUSG000000028234	Rps20	5813.730175	-0.547196384	0.146150606	-3.744058254	0.000181072	0.003267889
ENSMUSG000000043929	Klhl15	169.8802011	-0.563125539	0.150676882	-3.737305489	0.000186003	0.003326783
ENSMUSG000000069793	Sifn9	843.7224009	-0.518732275	0.138926015	-3.733874293	0.000188557	0.003365198
ENSMUSG000000027457	Snph	313.1822102	-0.563973692	0.151280062	-3.728010718	0.000192997	0.003433362
ENSMUSG000000096001	2610528A11Rik	34.39894502	-1.015560217	0.272592986	-3.725555209	0.000194886	0.003459536
ENSMUSG000000061838	Suc1g2	2256.172213	-0.42676782	0.114848744	-3.715911951	0.000202472	0.003582697
ENSMUSG000000066687	Zbtb16	77.48762368	-1.178907031	0.317646019	-3.711386133	0.000206127	0.00362417
ENSMUSG000000022330	Osr2	406.2227382	-0.781162442	0.210588744	-3.709421633	0.000207733	0.003644674
ENSMUSG000000000959	Oxal1	861.1167793	-0.523347145	0.14124381	-3.705274917	0.000211162	0.0036931
ENSMUSG000000052926	Rnaseh2a	416.4235132	-0.45181882	0.121932742	-3.705475777	0.000210994	0.0036931
ENSMUSG000000020623	Map2k6	177.8751006	-0.58326996	0.157507833	-3.703117156	0.000212967	0.003716825
ENSMUSG000000032561	Acpp	687.8774114	-0.542103978	0.146474021	-3.701024749	0.000214731	0.003743672
ENSMUSG000000046434	Hnrnpa1	3355.852362	-0.423184323	0.114366524	-3.700246439	0.00021539	0.003750054
ENSMUSG000000090035	Galnt4	2387.760453	-0.382292636	0.103320673	-3.700059487	0.000215549	0.003750054
ENSMUSG000000027661	Slc2a10	58.03397185	-0.871143689	0.235775862	-3.694795902	0.000220064	0.003812594
ENSMUSG000000032239	Rp9	537.2347348	-0.437114777	0.118405504	-3.691676165	0.000222781	0.00384361
ENSMUSG000000029106	Add1	3352.359151	-0.396878611	0.107501508	-3.691842276	0.000222636	0.00384361
ENSMUSG000000041961	Znrf3	327.6579474	-0.607173715	0.16455244	-3.689849355	0.000224387	0.003863276
ENSMUSG000000028496	MLlt3	631.0535897	-0.353489507	0.095898428	-3.686082411	0.000227733	0.003904661
ENSMUSG000000024442	O610009O20Rik	585.8744431	-0.374914764	0.10174302	-3.684918759	0.000228776	0.003918491
ENSMUSG000000031891	Hsd11b2	107.8993844	-0.905022648	0.245696563	-3.683497394	0.000230056	0.003936349
ENSMUSG000000029086	Prom1	2475.074364	-0.657423957	0.178535678	-3.682311378	0.000231129	0.003946567
ENSMUSG000000050982	Apol10a	6510.720004	-0.723551989	0.196579485	-3.680709561	0.000232586	0.003955152
ENSMUSG000000035948	Acss3	14.59060029	-1.204115039	0.327260219	-3.679381026	0.000233801	0.003967673
ENSMUSG000000071856	Mcc	443.1042799	-0.613095773	0.166623217	-3.679533877	0.000233661	0.003967673
ENSMUSG000000099966	2810402E24Rik	95.12227534	-0.636197886	0.17294901	-3.678528637	0.000234583	0.003976482
ENSMUSG000000052271	Bhlha15	212.3496609	-0.687668966	0.187115106	-3.675111973	0.000237745	0.004009984
ENSMUSG000000017607	Tns4	1128.205342	-0.491836852	0.133907405	-3.672962313	0.000239755	0.004039772
ENSMUSG000000037808	Fam76b	512.0789369	-0.397173992	0.10815374	-3.672309358	0.000240369	0.004041896
ENSMUSG000000021466	Ptch1	384.7648008	-0.543446467	0.148107313	-3.66926275	0.000243251	0.004077959
ENSMUSG000000037826	Ppm1k	278.9602396	-0.510263022	0.139060101	-3.669370413	0.000243149	0.004077959
ENSMUSG000000054342	Kcnn4	920.0640085	-0.548972926	0.14978475	-3.665078887	0.000247262	0.004136841
ENSMUSG000000047139	Cd24a	2651.447482	-0.825800796	0.225378481	-3.664062297	0.000248246	0.004144939
ENSMUSG000000032604	Qars	2924.836545	-0.277661239	0.07581072	-3.662559064	0.000249708	0.004156788
ENSMUSG000000025092	Hspa12a	326.3171066	-0.992247178	0.27132951	-3.656982167	0.000255202	0.004239731
ENSMUSG000000027331	Knstrn	507.272283	-0.530500293	0.145206893	-3.653409845	0.000258781	0.004287312
ENSMUSG000000098188	Sowahc	793.8605522	-0.357525538	0.097862407	-3.653349124	0.000258842	0.004287312
ENSMUSG000000023039	Krt7	1032.757435	-0.525101777	0.143780785	-3.652099808	0.000260105	0.004303929
ENSMUSG000000021536	Adcy2	9.902834579	-1.192850564	0.327394638	-3.643463954	0.000268993	0.004428907
ENSMUSG000000060739	Nsa2	1729.093261	-0.495452332	0.136028863	-3.642258862	0.000270256	0.004445284
ENSMUSG000000031217	Efnb1	1697.649275	-0.309979389	0.085169889	-3.639542017	0.000273123	0.004487994
ENSMUSG000000031608	Galnt7	1951.627963	-0.370030541	0.101711883	-3.638026652	0.000274735	0.004510006
ENSMUSG000000021684	Pde8b	214.0722512	-0.555024429	0.152759924	-3.633311759	0.000279807	0.004561645
ENSMUSG000000030729	Pgm21l	412.592047	-0.61260099	0.16868097	-3.631713704	0.000281545	0.004585484
ENSMUSG000000032218	Ccnb2	644.0978832	-0.56810052	0.156456801	-3.631037559	0.000282284	0.0045885
ENSMUSG000000073077	Gm1713	55.36391102	-0.886534693	0.244556062	-3.625077564	0.000288875	0.004681694
ENSMUSG000000037174	Elf2	1104.603141	-0.283963333	0.078338294	-3.624834251	0.000289147	0.004681694
ENSMUSG00000103761	Gm37859	43.67953102	-0.926079943	0.255602439	-3.623126395	0.000291064	0.00470813
ENSMUSG000000054423	Cadps	22.77267391	-1.055477926	0.291489844	-3.620976674	0.000293493	0.004733244
ENSMUSG000000047264	Zfp358	102.2234651	-0.799698862	0.220865945	-3.620743165	0.000293758	0.004733244
ENSMUSG000000031311	Nono	2853.333407	-0.42492858	0.11742351	-3.618769181	0.000296008	0.004763137
ENSMUSG000000020019	Ntn4	253.8108015	-0.914898726	0.252918298	-3.617368664	0.000297613	0.004781422
ENSMUSG000000060679	Mrps9	740.2637519	-0.43980764	0.121824357	-3.610178208	0.000305987	0.0049017
ENSMUSG000000028996	Rbp7	294.591436	-0.720209135	0.199643294	-3.607479725	0.000309186	0.004939527
ENSMUSG000000053931	Cnn3	948.7450088	-0.702177558	0.167009235	-3.605654263	0.000311368	0.004963916
ENSMUSG000000074480	Mex3a	57.73946586	-0.642094411	0.220323988	-3.604734179	0.000312473	0.004976749
ENSMUSG000000035757	Selo	597.4516502	-0.334969913	0.092983374	-3.602471042	0.000315207	0.005013428
ENSMUSG000000024056	Ndc80	204.7536589	-0.524714377	0.145765188	-3.599723533	0.000318556	0.005054214
ENSMUSG000000021506	Pitx1	157.7855651	-0.616987326	0.171458816	-3.59845787	0.00032011	0.005074014
ENSMUSG000000026205	Slc23a3	31.94969046	-0.950277394	0.264108244	-3.59806033	0.000320599	0.005076921
ENSMUSG000000024143	Rhoq	791.1417893	-0.424060514	0.117968688	-3.594687026	0.000324782	0.005138246
ENSMUSG000000032349	Elovl5	549.9801846	-0.588363535	0.117968688	-3.592902956	0.000327014	0.005168636

ENSMUSG00000039328	Rnf122	32.42438919	-0.948498597	0.264286097	-3.58890841	0.000332066	0.005238483
ENSMUSG00000059474	Mbtd1	731.342120	-0.122441111	0.122441111	-3.58890841	0.000332661	0.005242885
ENSMUSG00000030986	Dhx32	965.2865681	-0.458902521	0.128212131	-3.579244161	0.000344589	0.005389899
ENSMUSG00000021636	Marveld2	660.5216505	-0.317429633	0.088744235	-3.576904256	0.000347687	0.005428115
ENSMUSG00000027189	Trim44	366.1461534	-0.449834201	0.125879895	-3.573519038	0.000352216	0.005493636
ENSMUSG00000032232	Cgnl1	63.07844341	-0.935699096	0.261888833	-3.572886572	0.000353068	0.005501751
ENSMUSG00000043629	1700019D03Rik	165.5163211	-0.702942185	0.197159788	-3.565342572	0.000363381	0.005630711
ENSMUSG00000031988	Vps26b	903.136945	-0.308525161	0.086584283	-3.563292912	0.000366232	0.005664292
ENSMUSG00000038816	Ctnnal1	293.7096014	-0.559550755	0.157085431	-3.56207926	0.000367929	0.005679951
ENSMUSG00000020493	Prr11	146.4457483	-0.725536291	0.203824391	-3.559614662	0.000371399	0.00571755
ENSMUSG00000096956	Snhg18	184.2515986	-0.558873032	0.157046853	-3.558638842	0.000372782	0.005733507
ENSMUSG00000054723	Vmac	100.8335546	-0.637962842	0.179362075	-3.556843562	0.000375338	0.005767466
ENSMUSG000000096472	Cdkn2d	93.13640781	-0.612685612	0.172396016	-3.553942985	0.000379502	0.005809912
ENSMUSG00000039982	Dtx4	691.8628254	-0.603949442	0.169963852	-3.553399357	0.000380287	0.005816562
ENSMUSG00000022129	Dct	7.98614517	-1.163847469	0.327611345	-3.552524929	0.000381553	0.005825181
ENSMUSG00000035293	Gze3	673.0309308	-0.462930438	0.130336202	-3.55181777	0.00038258	0.005835035
ENSMUSG00000049551	Fzd9	43.63208829	-0.995522068	0.280389895	-3.550491962	0.000384512	0.005843453
ENSMUSG00000032423	Syncr1p	2121.693328	-0.355662735	0.100260163	-3.547398343	0.000389056	0.005896295
ENSMUSG00000029836	Cbx3	1232.124641	-0.478567137	0.13499651	-3.545033391	0.000392563	0.005938595
ENSMUSG00000020653	Klf11	143.62747	-0.713251316	0.201465053	-3.540322779	0.000399638	0.006018163
ENSMUSG00000006494	Pdk1	1050.97368	-0.404206398	0.11419038	-3.539758761	0.000400493	0.006025565
ENSMUSG00000051627	Hist1h1e	3934.340244	-0.474217531	0.134059625	-3.537362808	0.000404144	0.006058507
ENSMUSG00000027715	Ccna2	1528.098468	-0.606065343	0.171962108	-3.524412157	0.000424424	0.00630697
ENSMUSG00000038766	Gabpb2	2162.960917	-0.370173294	0.10502011	-3.524784883	0.000423827	0.00630697
ENSMUSG00000086968	4933431E20Rik	191.745732	-0.613759868	0.174541206	-3.51641818	0.000437412	0.006475252
ENSMUSG00000031596	Slc7a2	85.38858775	-0.84580699	0.240679844	-3.514241062	0.000441012	0.006497843
ENSMUSG00000057400	Ces1c	58.05138247	-1.055109338	0.300678915	-3.50908988	0.000449643	0.006599896
ENSMUSG00000041607	Mbp	1031.161107	-0.425030031	0.121178434	-3.507472564	0.000452385	0.00663178
ENSMUSG00000025790	Slco3a1	254.9255626	-0.666904723	0.19023702	-3.505651656	0.000455491	0.006665525
ENSMUSG00000022305	Lrp12	541.4134192	-0.648507714	0.185050844	-3.504483965	0.000457493	0.006683027
ENSMUSG00000022489	Pde1b	56.01900635	-0.73296419	0.209240438	-3.502975801	0.000460091	0.006715064
ENSMUSG00000042743	Sgtb	19.003591	-1.029107251	0.294395049	-3.495667655	0.000472877	0.006866969
ENSMUSG00000027938	Creb3l4	125.675754	-0.753875335	0.215643667	-3.495930782	0.000472411	0.006866969
ENSMUSG00000054161	Fam83e	1583.34704	-0.430448617	0.123193208	-3.494093751	0.000475674	0.006899977
ENSMUSG00000053647	Gper1	30.91781888	-1.008397732	0.28875943	-3.492172473	0.000479109	0.006937662
ENSMUSG00000024900	Cpt1a	3810.980439	-0.560577355	0.160541632	-3.491788071	0.000479799	0.006939796
ENSMUSG00000020610	Amz2	413.4846294	-0.390373924	0.111803624	-3.491603503	0.00048013	0.006939796
ENSMUSG00000050505	Pcdh20	4.042962323	-1.092674273	0.313037838	-3.490550155	0.000482027	0.006955622
ENSMUSG00000033068	Entpd6	653.9194487	-0.368577861	0.105631563	-3.489277729	0.000484328	0.006982741
ENSMUSG00000102336	Gm37233	100.6399144	-0.74575381	0.214372617	-3.478773651	0.000503714	0.007205846
ENSMUSG00000036940	Kdm1a	820.4611394	-0.356160066	0.10241192	-3.477720804	0.000505696	0.00722797
ENSMUSG00000021120	Pigh	292.7712781	-0.465904706	0.134056027	-3.475447654	0.000510002	0.007276958
ENSMUSG00000027086	Fastkd1	326.6825041	-0.436729651	0.125674807	-3.475077144	0.000510707	0.007280751
ENSMUSG00000020778	Ten1	257.1093268	-0.493086578	0.141931112	-3.474126073	0.00051252	0.00730033
ENSMUSG00000024132	Ec1	914.7412577	-0.384514599	0.11075134	-3.471873108	0.000516841	0.007355551
ENSMUSG00000030302	Atp2b2	11.00584722	-1.13005648	0.325567335	-3.471037662	0.000518451	0.007372146
ENSMUSG00000029426	Scarb2	1676.146235	-0.510221117	0.147005493	-3.470762269	0.000518983	0.007373387
ENSMUSG00000054942	Fam73a	593.5555712	-0.513693946	0.148075949	-3.469124789	0.000522157	0.007412124
ENSMUSG00000025075	Habp2	339.22197	-0.793458336	0.228853631	-3.46709961	0.000526107	0.007461807
ENSMUSG00000025016	Tm9sf3	8483.496878	-0.40523043	0.116894916	-3.466621516	0.000527043	0.007468701
ENSMUSG00000039765	Cc2d2a	233.521813	-0.831217635	0.239830813	-3.465850047	0.000528558	0.007477382
ENSMUSG00000028857	Tmem222	384.0867432	-0.376047761	0.108707916	-3.459249092	0.000541684	0.00762653
ENSMUSG00000108067	Gm43953	4.030244278	-1.08470914	0.313684669	-3.457960329	0.000544282	0.007641141
ENSMUSG00000056602	Fry	427.0993577	-0.622912522	0.180130722	-3.458113725	0.000543972	0.007641141
ENSMUSG00000060261	Gtf2i	1240.813616	-0.32935685	0.095254921	-3.457636059	0.000544937	0.007643871
ENSMUSG00000021669	Col4a3bp	1583.827158	-0.367565158	0.106327738	-3.456907544	0.000546412	0.007658086
ENSMUSG000000097494	4933406C10Rik	26.88102917	-0.927110823	0.268347715	-3.454886218	0.000550525	0.007702706
ENSMUSG00000005873	Reep5	141.3107818	-0.894687079	0.259200018	-3.451724609	0.000557016	0.007780391
ENSMUSG00000003166	Dgcr2	1457.113184	-0.440121146	0.12751643	-3.451485793	0.000557509	0.007780725
ENSMUSG00000037953	A4gnt	31.92588017	-1.12418628	0.325922635	-3.449242737	0.000562161	0.007825887
ENSMUSG00000026603	Smyd2	547.1394136	-0.458740403	0.133118382	-3.446108618	0.000568722	0.007877532
ENSMUSG00000032121	Tmem218	49.0721601	-0.900137569	0.261916435	-3.436735719	0.00058877	0.008080963
ENSMUSG00000042029	Ncapg2	641.3012226	-0.570847665	0.166292993	-3.432782433	0.000597421	0.008176409
ENSMUSG00000026638	Irf6	3930.552259	-0.246750645	0.071883269	-3.432657566	0.000597697	0.008176409
ENSMUSG00000028140	Mrp19	1107.933782	-0.376113872	0.109646755	-3.430232589	0.000603064	0.008229467
ENSMUSG00000025026	Add3	3568.557661	-0.536099392	0.156374617	-3.428301883	0.000607037	0.008274601
ENSMUSG00000040591	1110051M20Rik	25.14113541	-0.946496582	0.276708377	-3.420556295	0.000624932	0.008472095
ENSMUSG000000051184	Zfp524	88.20618538	-0.629032593	0.18401408	-3.418393824	0.000629919	0.008518805
ENSMUSG00000039231	Suv39h1	467.9355942	-0.497013994	0.145384806	-3.418610298	0.000629418	0.008518805
ENSMUSG00000019917	Sept10	193.4896014	-0.554622824	0.162341976	-3.416385806	0.000634583	0.008569465
ENSMUSG000000025289	Prdx4	346.825324	-0.55130404	0.161372893	-3.416336096	0.000634699	0.008569465
ENSMUSG00000038963	Slco4a1	132.4671526	-0.517726435	0.151673377	-3.413429871	0.000641507	0.008640277
ENSMUSG00000020808	Fam64a	9.671162927	-1.114705673	0.326641972	-3.412622285	0.000643411	0.008651863
ENSMUSG000000087370	Tmem170b	553.7234983	-0.380394368	0.111497747	-3.411677627	0.000645644	0.008674863
ENSMUSG00000021704	Mtx3	550.377844	-0.429786844	0.126010501	-3.410722456	0.00064791	0.008698258
ENSMUSG00000033998	Kcnk1	625.01346	-0.508504859	0.149131182	-3.409782268	0.000650148	0.008721236
ENSMUSG00000030942	Thumpd1	563.1766574	-0.530357419	0.155579151	-3.408923458	0.000652198	0.008734603
ENSMUSG00000041120	Nbl1	196.5457041	-0.916953655	0.269094767	-3.40754919	0.000655491	0.008764548
ENSMUSG00000015533	Iltga2	622.393941	-0.551598737	0.161913405	-3.406751519	0.00065741	0.008783118
ENSMUSG00000027994	Ccdc109b	14.40370817	-1.099790175	0.322854167	-3.406461141	0.000658109	0.008785387
ENSMUSG00000028763	Hspg2	1294.568032	-0.646060112	0.189706898	-3.40556996	0.000660261	0.008804489
ENSMUSG00000078903	Gm14391	354.9361061	-0.53618995	0.157519245	-3.403964707	0.000664153	0.008842811
ENSMUSG000000047821	Trim16	644.4715292	-0.395535734	0.116204027	-3.403804008	0.000664544	0.008842811
ENSMUSG00000099474	1700097N02Rik	54.11757444	-0.746312505	0.219346823	-3.402431341	0.000667891	0.008873108
ENSMUSG00000091337	Eid1	104.4620425	-0.589334336	0.173455073	-3.397619502	0.000679749	0.008994603
ENSMUSG00000043885	Slc36a4	74.52445632	-0.72961878	0.214807032	-3.39662428	0.000682226	0.009015935
ENSMUSG00000018983	E2f2	773.1982194	-0.553399281	0.162952906	-3.396068801	0.000683612	0.009016931
ENSMUSG000000108076	9530086O07Rik	4.231700568	-1.080859368	0.318693942	-3.391527812	0.000695041	0.009124134
ENSMUSG00000068551	Zfp467	71.63031156	-0.754772201	0.22249589	-3.392297272	0.000693092	0.009124134
ENSMUSG00000060093	Hist1h4a	1111.945242	-0.645155555	0.190217842	-3.391666877	0.000694688	0.009124134
ENSMUSG00000046618	Olfrml2a	7.423944317	-1.110132578	0.327402726	-3.390724906	0.00069708	0.009136436
ENSMUSG00000005958	Ephb3	394.1544143	-0.597835657	0.214807032	-3.390843814	0.000696778	0.009136436

ENSMUSG00000019982	Myb	1615.474058	-0.466491564	0.137735238	-3.386871588	0.000706945	0.009256735
ENSMUSG00000032376	Usp3	1557.69110	-0.07708825	0.07708825	-3.386871588	0.000707504	0.009256735
ENSMUSG00000048537	Phldb1	490.2169141	-0.518478682	0.153137573	-3.385705234	0.000709956	0.009275863
ENSMUSG00000056153	Socs6	485.0960112	-0.524786219	0.155025122	-3.385168874	0.000711345	0.00928669
ENSMUSG00000039046	Usp6nl	1136.607258	-0.300585775	0.088847586	-3.383161965	0.000716564	0.009340114
ENSMUSG00000043705	Capn13	705.1634667	-1.08866641	0.321855052	-3.382474198	0.00071836	0.0093415
ENSMUSG00000022177	Haus4	268.2861434	-0.438662461	0.12983277	-3.378672896	0.000728366	0.009427253
ENSMUSG00000053580	Tanc2	263.2289221	-0.60621087	0.179468856	-3.377805393	0.000730668	0.009448725
ENSMUSG00000026519	Tmem63a	614.1678818	-0.496375019	0.147114216	-3.374079219	0.000740631	0.009533893
ENSMUSG00000027326	Casc5	848.6685167	-0.430216217	0.127505728	-3.374093258	0.000740593	0.009533893
ENSMUSG00000022840	Adcy5	42.47613432	-0.991291491	0.293940827	-3.372418531	0.000745111	0.009584131
ENSMUSG00000068877	Selenbp2	24.19814528	-0.921065995	0.273177835	-3.371671778	0.000747134	0.009602703
ENSMUSG00000071748	Gm14698	313.7576291	-0.411666542	0.12213989	-3.370451227	0.000750452	0.009637872
ENSMUSG00000031442	Mcf2l	797.4351183	-0.586031996	0.173925007	-3.369452198	0.000753178	0.009651497
ENSMUSG00000027303	Ptpra	618.3829979	-0.384181949	0.114020123	-3.369422342	0.000753259	0.009651497
ENSMUSG00000097493	9930014A18Rik	103.0744137	-0.586783378	0.174214611	-3.368163972	0.000756706	0.009673232
ENSMUSG00000047945	Marcksl1	198.9807194	-0.567545041	0.168535254	-3.367515271	0.000758488	0.009688548
ENSMUSG00000027167	Elp4	193.5384683	-0.472480978	0.140314734	-3.367294127	0.000759097	0.009688857
ENSMUSG00000087598	Zfp111	166.1087612	-0.670613172	0.199206703	-3.366418713	0.00076151	0.009704719
ENSMUSG00000060591	Ifitm2	563.143278	-0.623032415	0.185271697	-3.362804068	0.000771551	0.009810058
ENSMUSG00000034648	Lrrn1	6.982951918	-1.100505015	0.327410343	-3.361240839	0.000775931	0.009850645
ENSMUSG00000022816	Fstl1	40.79389671	-0.825092637	0.245506178	-3.360781567	0.000777223	0.009859489
ENSMUSG00000030541	Idh2	1335.997031	-0.454946085	0.13539592	-3.36011665	0.000779096	0.009875693
ENSMUSG00000030737	Slco2b1	1430.209423	-0.403060436	0.119989303	-3.359136392	0.000781865	0.009903221
ENSMUSG00000023074	Mospd1	244.6453917	-0.427390685	0.12727048	-3.35812897	0.00078472	0.009931799
ENSMUSG0000004655	Aqp1	3999.358598	-0.597966635	0.178147036	-3.356590429	0.000789099	0.009979606



Table S3 Upregulated genes in intestinal organoids from H2b/p53dIEC vs. H2bdlIEC

Gene ID	baseMean	log2FoldChange	lfcSE	stat	pvalue	genenames
ENSMUSG0007369.835478	1.586536993	0.072140313	21.99237734	3.4067E-107	8.8408E-104	Olfm4
ENSMUSG0002776.644471	1.386314922	0.076328984	18.16236562	1.02511E-73	1.45109E-70	Igfbp4
ENSMUSG0005394.394131	1.664161555	0.095333691	17.45617464	3.08956E-68	3.43626E-65	Lyz1
ENSMUSG000301.6417643	2.515527417	0.155805239	16.14533273	1.22486E-58	1.27149E-55	Pla2g5
ENSMUSG000360.799917	1.881898111	0.128354992	14.66166674	1.13453E-48	9.2978E-46	Prss32
ENSMUSG000683.5288875	1.490816135	0.104465254	14.27092812	3.32129E-46	2.35072E-43	Cirbp
ENSMUSG000171.2708914	3.411267967	0.243635326	14.00153263	1.52545E-44	9.897E-42	Sfrp5
ENSMUSG000152.1220191	3.172813838	0.230746603	13.75020824	5.07831E-43	2.82409E-40	Pcdh8
ENSMUSG000120.9720384	3.335553839	0.251416005	13.26707041	3.59357E-40	1.80501E-37	Cyp1a1
ENSMUSG0002247.253044	1.352723051	0.1038465	13.02617852	8.68497E-39	4.09799E-36	Akp3
ENSMUSG000130.8083521	3.333734513	0.256083016	13.01817889	9.64436E-39	4.41684E-36	AA465934
ENSMUSG000116.4305457	4.018249419	0.321140437	12.51243679	6.38354E-36	2.48495E-33	Xaf1
ENSMUSG000451.8645723	1.560185151	0.129761539	12.02347906	2.67468E-33	8.86116E-31	Oit1
ENSMUSG000482.0941966	1.409221278	0.117935668	11.94906767	6.56577E-33	2.08644E-30	Cdo1
ENSMUSG000886.7230709	1.945786666	0.163616884	11.89233419	1.2973E-32	4.04004E-30	Ifitm3
ENSMUSG000134.3851479	2.356831008	0.199267423	11.82747774	2.81473E-32	8.59376E-30	Nrp2
ENSMUSG0001757.278507	1.126288383	0.098297289	11.45798015	2.14458E-30	6.0715E-28	Tns3
ENSMUSG000101.4345239	2.826270099	0.24690936	11.44658955	2.4458E-30	6.80063E-28	Gm29797
ENSMUSG000188.9447929	2.113632625	0.187375943	11.28017073	1.64427E-29	4.26714E-27	Rassf5
ENSMUSG0001021.466573	1.130476424	0.100669544	11.22957725	2.91872E-29	7.33022E-27	Sorcs2
ENSMUSG000117.0634683	2.338132704	0.208666246	11.20513138	3.84782E-29	9.36164E-27	Cd177
ENSMUSG00076.69582305	3.809193935	0.34448554	11.05763084	2.01346E-28	4.61052E-26	Rsad2
ENSMUSG0002106.380218	0.844390126	0.076794948	10.99538646	4.02187E-28	9.07602E-26	Slc25a4
ENSMUSG000858.6245391	1.110439568	0.101385606	10.95263534	6.4542E-28	1.39581E-25	Dpysl5
ENSMUSG000187.3031405	1.768806497	0.168681095	10.48609804	1.00076E-25	1.99781E-23	Myo5a
ENSMUSG00069.08190339	3.224645166	0.309089095	10.43273676	1.75752E-25	3.46409E-23	Isg15
ENSMUSG000424.2871805	1.236166267	0.119040376	10.38442841	2.91913E-25	5.61157E-23	Slc16a12
ENSMUSG0002666.272843	0.918432111	0.088591804	10.36702233	3.5027E-25	6.65128E-23	Ly6e
ENSMUSG0001183.247264	1.160618893	0.112625953	10.30507501	6.68395E-25	1.22442E-22	Sesn3
ENSMUSG000178.2689189	1.918278053	0.187161023	10.24934582	1.19147E-24	2.15726E-22	Fam20a
ENSMUSG000611.5126764	1.049471744	0.102490259	10.23972184	1.31614E-24	2.35559E-22	Ncald
ENSMUSG00064.56791796	5.084639309	0.505948641	10.04971433	9.21341E-24	1.59402E-21	Pla2g2a
ENSMUSG0001347.348276	0.846014537	0.084624398	9.997288703	1.56627E-23	2.63855E-21	Myb
ENSMUSG0006323.667234	0.702548862	0.070378981	9.982367619	1.8207E-23	3.01596E-21	Vdr
ENSMUSG000166.5600573	1.744370061	0.174847947	9.976497247	1.93166E-23	3.16609E-21	Ccl9
ENSMUSG000305.2264383	1.26594747	0.128689989	9.837186847	7.78574E-23	1.22456E-20	Fam46c
ENSMUSG0003022.082871	0.730110645	0.074961778	9.739772312	2.04011E-22	3.11437E-20	Mat2a
ENSMUSG000485.6975558	1.048942756	0.108757482	9.644787068	5.17184E-22	7.66959E-20	Msi1
ENSMUSG00053.88789632	3.406632801	0.360408143	9.452152694	3.31933E-21	4.74177E-19	Fstl1
ENSMUSG0001839.301634	0.75317401	0.079714057	9.448490071	3.43753E-21	4.82215E-19	Cdca7
ENSMUSG000373.6291523	1.526896006	0.161732733	9.44085949	3.69734E-21	5.0948E-19	Neurog3
ENSMUSG0006731.323449	0.891915047	0.095380506	9.351125101	8.67203E-21	1.15412E-18	Clca3b
ENSMUSG000198.7084677	1.522576578	0.16307394	9.336725274	9.93597E-21	1.31113E-18	Ntn4
ENSMUSG000131.7075724	1.85733897	0.201278467	9.227708251	2.76484E-20	3.58761E-18	Ccdc3
ENSMUSG000108.2202079	2.056010604	0.223184264	9.212166529	3.19608E-20	4.1129E-18	Serpinf2
ENSMUSG000235.8040044	1.454161623	0.158439474	9.178026075	4.39066E-20	5.60385E-18	Reg3b
ENSMUSG0001324.070375	0.752333753	0.082422055	9.127820858	6.98919E-20	8.77651E-18	Tef
ENSMUSG000638.9392754	1.13297841	0.125775136	9.007968076	2.09909E-19	2.6148E-17	Ephb3
ENSMUSG00091.64708954	1.997703034	0.223127318	8.95319788	3.4533E-19	4.20089E-17	Psmb8
ENSMUSG000467.8620478	0.976005537	0.109167815	8.940414718	3.87713E-19	4.6799E-17	Slit2
ENSMUSG000161.9720069	1.796932778	0.202738007	8.863324679	7.7663E-19	9.30223E-17	Fgfr4
ENSMUSG00059.82100382	2.78080957	0.314385424	8.84522422	9.13447E-19	1.08575E-16	Ceacam10
ENSMUSG0002258.002036	0.821232032	0.093507415	8.782533797	1.59833E-18	1.87124E-16	Hnmpdl
ENSMUSG000522.3963157	1.084350972	0.124937082	8.679176383	3.98645E-18	4.63232E-16	Mcf1
ENSMUSG000215.0105858	1.461017787	0.168632692	8.663905972	4.55869E-18	5.21937E-16	Ascl2
ENSMUSG000535.2626171	1.029926726	0.120388649	8.555015254	1.17853E-17	1.29232E-15	Fgfr2
ENSMUSG0006375.740185	1.19955717	0.141152931	8.498280288	1.9242E-17	2.09523E-15	Dmbt1
ENSMUSG000568.0897502	0.846335479	0.099771249	8.482759217	2.19915E-17	2.34541E-15	Tmed6
ENSMUSG00060.07899275	2.53673969	0.299206924	8.478211858	2.28681E-17	2.42231E-15	Gkn3
ENSMUSG000488.7728986	0.930095611	0.109859847	8.46620161	2.53525E-17	2.66732E-15	L1cam
ENSMUSG000107.462887	1.775256259	0.211703157	8.385591822	5.04712E-17	5.23925E-15	Vash2
ENSMUSG000273.3956006	1.152947824	0.138583269	8.319531177	8.83119E-17	8.98761E-15	Tfcp2l1
ENSMUSG000207.2456476	1.361150164	0.164920608	8.253366175	1.53994E-16	1.55704E-14	Cttnbp2
ENSMUSG000197.408344	1.276725135	0.155445376	8.213336215	2.15126E-16	2.13358E-14	Ptbp2
ENSMUSG000458.922039	0.993855458	0.120999227	8.213733935	2.14414E-16	2.13358E-14	Hist1h1c
ENSMUSG00040.04439645	3.39564182	0.414616371	8.189840193	2.61573E-16	2.56161E-14	Crp
ENSMUSG000850.9127982	0.906508643	0.110752875	8.184967149	2.72378E-16	2.65075E-14	RbmX
ENSMUSG000700.8907276	0.80179219	0.099554134	8.053831174	8.02419E-16	7.3067E-14	Smpd13b
ENSMUSG000741.0447011	0.731143772	0.091469503	7.993306533	1.31367E-15	1.16887E-13	Pxylp1
ENSMUSG0006381.998018	0.5350836	0.067370323	7.942422914	1.9827E-15	1.74421E-13	Acly
ENSMUSG000483.5848507	0.937281377	0.118341732	7.920125572	2.37271E-15	2.06399E-13	Tns4
ENSMUSG000678.2632847	1.149802632	0.14615979	7.866750698	3.63971E-15	3.13116E-13	L210002F23Rik
ENSMUSG0005364.682405	0.562798171	0.072372734	7.776384015	7.46269E-15	6.2474E-13	Lypd8
ENSMUSG0001003.063923	0.668698588	0.086570069	7.724362467	1.12415E-14	9.26141E-13	Adar
ENSMUSG00036.74448903	3.216608685	0.417047717	7.712807321	1.2308E-14	1.0867E-12	Oas3
ENSMUSG000623.4485274	0.738965161	0.096933746	7.623404549	2.47071E-14	1.97289E-12	Clspn
ENSMUSG000140.2706856	1.499001282	0.19685867	7.614606352	2.64496E-14	2.10126E-12	Cacna1a
ENSMUSG0001887.212515	0.862866588	0.11337915	7.610452094	2.73139E-14	2.15891E-12	Gm43305
ENSMUSG000794.0956258	0.851111591	0.112009873	7.598540774	2.99488E-14	2.33167E-12	Atp2a3
ENSMUSG000961.4397048	0.971755199	0.128334883	7.572027005	3.67445E-14	2.83242E-12	Ttr
ENSMUSG00037.97002325	3.075214595	0.406418654	7.56661773	3.83067E-14	2.93829E-12	Sat2
ENSMUSG00048.54410243	2.73977225	0.363846333	7.530025725	5.07303E-14	3.7977E-12	Hoga1
ENSMUSG000235.4387384	1.089654667	0.144739067	7.528407406	5.13629E-14	3.82666E-12	Gm11488
ENSMUSG000356.1994397	0.926337459	0.123296059	7.513114894	5.77368E-14	4.24066E-12	Noxo1
ENSMUSG00031.60931563	3.722764665	0.496348285	7.500307299	6.36684E-14	4.65437E-12	Cxcl10
ENSMUSG00060.04202339	2.205115612	0.295379266	7.465370344	8.30656E-14	6.01588E-12	Dmpk
ENSMUSG0003257.600526	0.583947152	0.078309496	7.456913646	8.85727E-14	6.3556E-12	Ets2
ENSMUSG000986.8682673	0.692971769	0.093040882	7.448035269	9.47405E-14	6.70547E-12	Philpp1
ENSMUSG00033.98311032	3.230258292	0.434141971	7.44055748	1.00261E-13	7.06411E-12	Prepl
ENSMUSG000261.9953852	1.371871006	0.184886381	7.420076045	1.17053E-13	1.17053E-12	Insm1

ENSMUSG00C 387.2313623	0.867263463	0.11696504	7.414723793	1.21879E-13	8.51018E-12	Tstd1
ENSMUSG00C 531.0481051	1.279369343	0.174351323	7.337881488	2.17001E-13	1.46153E-11	Trp53i11
ENSMUSG00C 1101.377142	0.751210342	0.102427191	7.334091042	2.23231E-13	1.51128E-11	Glul
ENSMUSG00C 5875.364491	0.505038328	0.069149204	7.303602958	2.80162E-13	1.87228E-11	Hmgcr
ENSMUSG00C 97.74515051	1.511717204	0.20748768	7.285816714	3.19727E-13	2.10062E-11	Kcnf1
ENSMUSG00C 1171.270083	0.756375086	0.103939353	7.277080967	3.41121E-13	2.23176E-11	Tspan1
ENSMUSG00C 131.6299341	1.40611363	0.193650421	7.261092565	3.83976E-13	2.4912E-11	Tlcd2
ENSMUSG00C 365.6955076	0.891978406	0.122923821	7.256351137	3.97672E-13	2.55874E-11	Rab15
ENSMUSG00C 6294.393516	0.637334752	0.088610307	7.192557763	6.35887E-13	4.05795E-11	Aqp1
ENSMUSG00C 497.644327	0.841904385	0.117895859	7.141085276	9.25969E-13	5.81381E-11	Ceacam1
ENSMUSG00C 965.8563007	0.627200605	0.087987979	7.128253305	1.01651E-12	6.35663E-11	Trmt6
ENSMUSG00C 621.8814843	0.757686723	0.106828503	7.092552105	1.31661E-12	8.10314E-11	Dgcr8
ENSMUSG00C 94.88399662	2.019983274	0.284982844	7.088087291	1.35978E-12	8.33589E-11	Igtp
ENSMUSG00C 284.8350857	1.117644629	0.157702569	7.087041345	1.37009E-12	8.36617E-11	Ptpro
ENSMUSG00C 851.8118996	0.820001076	0.115734793	7.085173403	1.3887E-12	8.44668E-11	Fads3
ENSMUSG00C 117.8798826	1.422166124	0.201238802	7.067057192	1.58254E-12	9.58821E-11	Ripor2
ENSMUSG00C 145.9809345	1.335043007	0.189044007	7.062075263	1.64034E-12	9.8999E-11	Rnase1
ENSMUSG00C 334.2202389	1.183105608	0.167870332	7.047734966	1.81854E-12	1.08909E-10	Chpf2
ENSMUSG00C 159.1508408	1.330841671	0.189421082	7.025837124	2.12787E-12	1.26462E-10	Upb1
ENSMUSG00C 268.0202669	1.101948707	0.157044986	7.016771043	2.27054E-12	1.34428E-10	Shhg3
ENSMUSG00C 1432.633848	0.589101483	0.084144345	7.001082319	2.53993E-12	1.49242E-10	Kif20a
ENSMUSG00C 573.2225587	0.894594951	0.128131836	6.981831997	2.91355E-12	1.69914E-10	5330417C22Rik
ENSMUSG00C 164.87296	1.185484881	0.170129199	6.968144708	3.21148E-12	1.85896E-10	Sh3pxd2a
ENSMUSG00C 2180.593771	1.040067481	0.149285344	6.966976462	3.23825E-12	1.86751E-10	Gm10167
ENSMUSG00C 300.4217983	1.104974587	0.159198028	6.940881133	3.89662E-12	2.2225E-10	Bok
ENSMUSG00C 198.8386609	1.14268295	0.165113057	6.920609254	4.49705E-12	2.52793E-10	Mcc
ENSMUSG00C 440.7549187	0.849657488	0.122898607	6.913483456	4.72895E-12	2.6298E-10	Dil1
ENSMUSG00C 856.3649304	0.6127239	0.088692969	6.908370612	4.90252E-12	2.71662E-10	Pole
ENSMUSG00C 1184.530853	0.653701923	0.094650038	6.906515155	4.96704E-12	2.74262E-10	Slc20a1
ENSMUSG00C 4707.280999	0.852110066	0.124123273	6.865030581	6.6477E-12	3.63198E-10	Fus
ENSMUSG00C 224.4320277	0.951547326	0.138791228	6.855961594	7.08344E-12	3.84308E-10	Card6
ENSMUSG00C 338.8057902	0.981914155	0.14321174	6.856380296	7.06272E-12	3.84308E-10	Mpp3
ENSMUSG00C 400.9798537	0.850292448	0.117097094	6.854076595	7.17746E-12	3.88056E-10	Apobec3
ENSMUSG00C 2550.339521	0.567026913	0.0832878	6.808042855	9.89354E-12	5.31215E-10	Nolc1
ENSMUSG00C 3013.515305	0.656379971	0.096756881	6.783806625	1.1705E-11	6.17825E-10	Polr2a
ENSMUSG00C 227.0712323	1.108163445	0.16396221	6.758651553	1.39282E-11	7.27771E-10	Cela1
ENSMUSG00C 865.0029274	0.634995517	0.094227476	6.738963417	1.59521E-11	8.25214E-10	Helz2
ENSMUSG00C 59.90200254	1.78538847	0.264995532	6.737428568	1.61214E-11	8.31214E-10	AC241593.2
ENSMUSG00C 616.3022265	1.068892517	0.159283874	6.7106135	1.93808E-11	9.76628E-10	Tmem266
ENSMUSG00C 2223.553449	0.897792317	0.134284307	6.685757547	2.29733E-11	1.14004E-09	Axin2
ENSMUSG00C 101.487694	1.425538924	0.213241708	6.685084914	2.30791E-11	1.14084E-09	Epb42
ENSMUSG00C 71.36010524	1.604002293	0.240097236	6.680636234	2.37907E-11	1.17229E-09	Prox1
ENSMUSG00C 487.329653	0.716883854	0.10736544	6.677044831	2.43808E-11	1.19382E-09	Gm7199
ENSMUSG00C 44.68226915	2.125708542	0.318450425	6.675163154	2.46957E-11	1.20545E-09	Cep112
ENSMUSG00C 1947.31662	0.597941073	0.089617749	6.672127806	2.52121E-11	1.2268E-09	Fam117b
ENSMUSG00C 611.2300999	0.694919084	0.1043492	6.659553551	2.74661E-11	1.32407E-09	Cyba
ENSMUSG00C 320.5766591	0.969158513	0.145608811	6.655905708	2.81561E-11	1.35314E-09	Reg3g
ENSMUSG00C 3105.372817	0.833981858	0.125664061	6.636598017	3.21006E-11	1.53796E-09	Cyp2b10
ENSMUSG00C 106.3008235	1.396154327	0.211420353	6.603689304	4.0105E-11	1.90389E-09	Igfbp2
ENSMUSG00C 64.09024099	1.76890119	0.268688952	6.58345339	4.59645E-11	2.17542E-09	Mtus2
ENSMUSG00C 53.22380814	2.035422015	0.30937796	6.579078928	4.73371E-11	2.2336E-09	Ifi47
ENSMUSG00C 54.48453079	1.906293469	0.289789766	6.578194591	4.76195E-11	2.24013E-09	Tekt5
ENSMUSG00C 600.7430203	0.64976268	0.098897578	6.570056565	5.02962E-11	2.35184E-09	Nav1
ENSMUSG00C 419.9184879	1.065402381	0.162186976	6.568976181	5.06624E-11	2.36187E-09	Crtc1
ENSMUSG00C 133.0356144	1.152572731	0.175556142	6.565265778	5.19401E-11	2.40702E-09	Tnfrsf19
ENSMUSG00C 68.97037637	1.656310685	0.252609099	6.556813233	5.49698E-11	2.53235E-09	C1ra
ENSMUSG00C 666.904165	0.778196217	0.118722109	6.554770827	5.57274E-11	2.55215E-09	Lbh
ENSMUSG00C 58.21393067	2.396802998	0.366587915	6.538139688	6.22887E-11	2.84428E-09	Ifit1bl1
ENSMUSG00C 2780.695713	0.63465598	0.097246751	6.526243562	6.74396E-11	3.06152E-09	Ewsr1
ENSMUSG00C 1644.75127	0.530174385	0.08131809	6.519759469	7.04202E-11	3.18754E-09	Thrap3
ENSMUSG00C 58.6776676	1.751708979	0.270656967	6.47206313	9.66737E-11	4.3132E-09	Hebp2
ENSMUSG00C 496.7054447	0.874823763	0.135771364	6.443359918	1.16857E-10	5.184E-09	Bend3
ENSMUSG00C 41.7604465	2.107134248	0.328090839	6.422411114	1.34133E-10	5.89994E-09	Gm7676
ENSMUSG00C 33.5814307	2.504371213	0.39162773	6.394774993	1.60784E-10	6.97372E-09	Wnt9b
ENSMUSG00C 218.3707016	0.947962	0.148754821	6.372647249	1.85793E-10	7.99166E-09	Shhg4
ENSMUSG00C 162.0516084	1.196486785	0.187853143	6.369266789	1.89934E-10	8.1249E-09	Card11
ENSMUSG00C 506.1452434	0.655227376	0.102921566	6.366278757	1.93669E-10	8.26199E-09	Rgcc
ENSMUSG00C 1905.466843	0.689778714	0.108378029	6.364562294	1.95847E-10	8.33208E-09	Alpi
ENSMUSG00C 114.9785034	1.281361161	0.20151011	6.358793404	2.03345E-10	8.62747E-09	Plut
ENSMUSG00C 321.2396576	0.755544889	0.118846712	6.357305785	2.05323E-10	8.68773E-09	Nt5dc2
ENSMUSG00C 138.2201327	1.18489442	0.186760392	6.344463126	2.23202E-10	9.3932E-09	Oas1a
ENSMUSG00C 140.0359528	1.161582673	0.183461361	6.331484021	2.42814E-10	1.01364E-08	Arhgap31
ENSMUSG00C 164.3474446	1.069238286	0.168903432	6.330471067	2.44414E-10	1.01759E-08	Pimreg
ENSMUSG00C 51.10496289	1.850511179	0.292892233	6.318061633	2.64864E-10	1.09106E-08	Gpc3
ENSMUSG00C 789.2205443	0.680757372	0.10819047	6.292211984	3.12974E-10	1.28245E-08	Gcnt3
ENSMUSG00C 5636.44605	7.654071414	1.216742237	6.290626874	3.16187E-10	1.29222E-08	Xist
ENSMUSG00C 107.6575768	1.208468577	0.192344571	6.282831751	3.32461E-10	1.35517E-08	Gli1d1
ENSMUSG00C 567.6422626	0.665837349	0.106990855	6.223310863	4.86772E-10	1.9385E-08	Slc30a2
ENSMUSG00C 732.6337404	0.731666239	0.118126723	6.193909568	5.86899E-10	2.30581E-08	Mycl
ENSMUSG00C 1593.221758	0.536703076	0.086674837	6.192144061	5.93513E-10	2.32201E-08	Nploc4
ENSMUSG00C 542.3052778	1.210318694	0.195484699	6.191373033	5.96424E-10	2.32755E-08	Slc1a1
ENSMUSG00C 2053.859689	0.547766448	0.088638531	6.179778039	6.41918E-10	2.48639E-08	Tmprss4
ENSMUSG00C 199.9543091	0.943284059	0.152826951	6.172236344	6.73307E-10	2.58866E-08	Zfp783
ENSMUSG00C 318.2285439	0.739169498	0.11986431	6.166718834	6.97216E-10	2.66741E-08	Tlcd1
ENSMUSG00C 39.93730662	2.037106248	0.330423195	6.165142999	7.04195E-10	2.6875E-08	Plcb4
ENSMUSG00C 3991.599371	0.46450682	0.075520779	6.150715458	7.71342E-10	2.93657E-08	Srsf6
ENSMUSG00C 778.1448019	0.582625042	0.094839059	6.14330265	8.08231E-10	3.06203E-08	Tshz1
ENSMUSG00C 1468.485794	0.469397466	0.076469238	6.138382915	8.33657E-10	3.1507E-08	Tmem97
ENSMUSG00C 194.9917147	0.947167559	0.154361127	6.136049785	8.45987E-10	3.18955E-08	Fut5
ENSMUSG00C 806.246707	0.625509649	0.10211262	6.125684041	9.02948E-10	3.38791E-08	Lrrc8d
ENSMUSG00C 1473.229708	0.533696802	0.087148321	6.124005549	9.12517E-10	3.41558E-08	Irf8
ENSMUSG00C 435.6544776	0.976791674	0.159796865	6.112708622	9.79541E-10	3.45902E-08	Nle1



ENSMUSG00C 1909.617521	0.475437136	0.078419973	6.062704693	1.33851E-09	4.904E-08	Rrm2
ENSMUSG00C 30.60668451	2.964919593	0.489580385	6.056042447	1.39511E-09	Table S3	Tlr1
ENSMUSG00C 209.1142108	0.989366008	0.163482327	6.051822397	1.43216E-09	5.21033E-08	Adra2a
ENSMUSG00C 140.2696486	1.046350095	0.173213506	6.040811232	1.53341E-09	5.55274E-08	Rbms1
ENSMUSG00C 153.3459655	1.052305204	0.175299802	6.002888729	1.93837E-09	6.87527E-08	Zfp618
ENSMUSG00C 30.55935005	2.490974084	0.415308637	5.997886544	1.99902E-09	7.05822E-08	Silf2
ENSMUSG00C 686.40117767	0.621294621	0.103613804	5.996253382	2.01922E-09	7.11341E-08	Rpa2
ENSMUSG00C 139.7601747	1.02676326	0.171454762	5.98853744	2.11736E-09	7.42556E-08	H2-Ab1
ENSMUSG00C 119.5634098	1.48516468	0.248079818	5.986640478	2.1422E-09	7.49576E-08	Dhx58
ENSMUSG00C 60.85977923	1.825151282	0.305193998	5.980298735	2.22729E-09	7.75863E-08	1700110K17Rik
ENSMUSG00C 624.7448347	0.597108756	0.100091979	5.96560043	2.43736E-09	8.41511E-08	Tiam1
ENSMUSG00C 57.65907245	1.679645982	0.281693844	5.962664843	2.48157E-09	8.54879E-08	A230050P20Rik
ENSMUSG00C 734.396195	0.649473141	0.109005762	5.958154228	2.55103E-09	8.74083E-08	Farp1
ENSMUSG00C 99.92532121	1.193863721	0.200454587	5.955781505	2.58832E-09	8.83832E-08	Psmb9
ENSMUSG00C 227.2117894	0.856330533	0.143858224	5.952600486	2.63915E-09	8.99217E-08	Ada
ENSMUSG00C 984.311058	0.536032959	0.090191676	5.943264168	2.79402E-09	9.43723E-08	Spata13
ENSMUSG00C 3366.541669	0.425682415	0.071756905	5.932285037	2.98747E-09	1.00421E-07	Hnmpd
ENSMUSG00C 516.9852636	0.670653469	0.113056672	5.932011432	2.99246E-09	1.00421E-07	Gm9523
ENSMUSG00C 596.0966578	0.586817124	0.099000789	5.927398466	3.07772E-09	1.0306E-07	Nt5c2
ENSMUSG00C 20.41699412	4.762476634	0.80464448	5.918733988	3.24429E-09	1.08173E-07	Sox18
ENSMUSG00C 1277.811872	0.52961329	0.089537763	5.914971204	3.31934E-09	1.10439E-07	Dnajc10
ENSMUSG00C 171.6309391	1.079955289	0.18346476	5.886445376	3.9459E-09	1.2989E-07	Wdr62
ENSMUSG00C 345.4073937	1.157187045	0.196788196	5.880368186	4.09355E-09	1.34191E-07	Irf9
ENSMUSG00C 383.630064	0.794146163	0.135108074	5.877858672	4.15608E-09	1.35669E-07	H2-Q4
ENSMUSG00C 400.9497671	0.725701636	0.123501917	5.876035384	4.20209E-09	1.36884E-07	Sox13
ENSMUSG00C 82.62611438	1.679038913	0.28600483	5.870666277	4.34047E-09	1.41097E-07	Cmpk2
ENSMUSG00C 34.72026604	2.204931616	0.37588448	5.865982067	4.46482E-09	1.44837E-07	Oas1g
ENSMUSG00C 3174.900777	0.524995537	0.08962737	5.857535875	4.69785E-09	1.52078E-07	Hcfc1
ENSMUSG00C 1870.210432	0.733203055	0.12521349	5.8556235	4.75224E-09	1.53203E-07	Utrn
ENSMUSG00C 224.0686889	0.909917365	0.155459267	5.853091814	4.82518E-09	1.54913E-07	Phf21b
ENSMUSG00C 364.3852553	0.778316142	0.133084914	5.848267214	4.9672E-09	1.58973E-07	Nmral1
ENSMUSG00C 567.5682835	0.682725445	0.116743016	5.848105255	4.97204E-09	1.58973E-07	Emc1
ENSMUSG00C 539.8227385	0.582490121	0.099636674	5.846141743	5.03105E-09	1.60431E-07	Sh3pxd2b
ENSMUSG00C 917.3491967	0.50338983	0.08628994	5.833702421	5.42108E-09	1.71946E-07	Pole3
ENSMUSG00C 199.7995807	0.916230381	0.157080914	5.832856179	5.44865E-09	1.72441E-07	Gpcpd1
ENSMUSG00C 198.1449809	0.862867395	0.14806777	5.827516632	5.62582E-09	1.76969E-07	Pea15a
ENSMUSG00C 166.219176	0.910480503	0.156231431	5.827767783	5.61737E-09	1.76969E-07	Heg1
ENSMUSG00C 570.5826661	0.859435942	0.148040441	5.805413288	6.42074E-09	2.00355E-07	Kcnn4
ENSMUSG00C 279.6833872	0.828271992	0.142683509	5.804959502	6.43816E-09	2.00497E-07	Fzd6
ENSMUSG00C 2929.711847	0.455300556	0.078567823	5.79500027	6.83211E-09	2.12341E-07	H2-D1
ENSMUSG00C 235.8424664	0.918698844	0.158873035	5.782597687	7.35558E-09	2.268E-07	Traip
ENSMUSG00C 787.5907731	0.709790862	0.122772817	5.781335617	7.41099E-09	2.27606E-07	Fam46a
ENSMUSG00C 382.8828861	0.715065772	0.123988117	5.767212111	8.05936E-09	2.45102E-07	Nlgn2
ENSMUSG00C 156.1138199	1.181268437	0.205062874	5.760518308	8.3856E-09	2.54527E-07	Klf12
ENSMUSG00C 36.19607623	1.97539413	0.3430154	5.758907997	8.46598E-09	2.56467E-07	6030419C18Rik
ENSMUSG00C 53.04774334	1.642508718	0.285330546	5.75651202	8.58697E-09	2.59627E-07	Ppef1
ENSMUSG00C 66.25616429	1.446338244	0.251303396	5.755346998	8.6464E-09	2.60917E-07	Epha7
ENSMUSG00C 439.1851901	0.824933355	0.143658821	5.74230912	9.33941E-09	2.80741E-07	Nr1d2
ENSMUSG00C 30.79273587	2.431471521	0.423462998	5.741874808	9.3634E-09	2.8092E-07	Obscn
ENSMUSG00C 44.54719866	1.7258522	0.30062122	5.740952684	9.41454E-09	2.81911E-07	Fzd3
ENSMUSG00C 540.0116198	0.667115385	0.116312658	5.735535537	9.72047E-09	2.89957E-07	Fhdc1
ENSMUSG00C 669.2720791	0.651458205	0.113592423	5.735049798	9.74837E-09	2.90233E-07	Gm1123
ENSMUSG00C 35.87743384	2.016716557	0.351733475	5.733649775	9.82922E-09	2.92082E-07	Pnliprp1
ENSMUSG00C 269.2580155	0.759209818	0.132646385	5.723562051	1.04313E-08	3.08796E-07	Gm10451
ENSMUSG00C 2401.062047	0.459087284	0.08037619	5.711732319	1.11832E-08	3.29798E-07	Hp1bp3
ENSMUSG00C 19.99502276	3.455217809	0.606450943	5.69743991	1.2162E-08	3.54633E-07	5330426L24Rik
ENSMUSG00C 1429.703309	0.541012159	0.095330899	5.67509764	1.3861E-08	3.99683E-07	Nup210
ENSMUSG00C 400.3281695	0.735369772	0.129641428	5.672336273	1.40863E-08	4.04683E-07	Lgals3
ENSMUSG00C 87.28387633	1.198140731	0.211325251	5.66965248	1.43087E-08	4.10316E-07	Shisa7
ENSMUSG00C 1369.403854	0.444463483	0.078469133	5.664182414	1.47727E-08	4.22842E-07	Gosr2
ENSMUSG00C 34.6830484	2.09590066	0.370267989	5.660496511	1.50936E-08	4.31233E-07	Nos2
ENSMUSG00C 41.76273768	2.036862771	0.360412634	5.651474397	1.59077E-08	4.51183E-07	Hs3st3b1
ENSMUSG00C 106.506037	1.125974493	0.200308839	5.621192253	1.89644E-08	5.33023E-07	Wnt3
ENSMUSG00C 85.71357666	1.205591956	0.214541949	5.619376358	1.91648E-08	5.36718E-07	Sox21
ENSMUSG00C 2451.89719	0.417657968	0.074379164	5.615254959	1.96273E-08	5.48682E-07	Usp22
ENSMUSG00C 145.3253475	0.924612639	0.165336571	5.592305633	2.24074E-08	6.20828E-07	Gm44950
ENSMUSG00C 786.4500826	1.06287904	0.19021495	5.587778671	2.29993E-08	6.36095E-07	Marcks1
ENSMUSG00C 32.36159304	2.367301322	0.42618269	5.554663233	2.78147E-08	7.63558E-07	Miat
ENSMUSG00C 19.91904085	2.954454167	0.53271668	5.546014008	2.92255E-08	7.99773E-07	Sp100
ENSMUSG00C 160.7727698	0.899264483	0.162218602	5.543534908	2.96426E-08	8.09762E-07	Lpcat1
ENSMUSG00C 130.9414009	0.974383545	0.17628849	5.527210243	3.25363E-08	8.84158E-07	5530601H04Rik
ENSMUSG00C 223.1229241	0.863624306	0.156299946	5.52542932	3.28681E-08	8.91618E-07	Ulbp1
ENSMUSG00C 155.6450538	0.897277655	0.162555	5.519840392	3.39308E-08	9.1725E-07	Cfi
ENSMUSG00C 28.80752964	2.576982872	0.467138282	5.516531125	3.45756E-08	9.31448E-07	Gm16863
ENSMUSG00C 593.106235	0.700566111	0.127189842	5.508035081	3.62861E-08	9.7248E-07	Slc6a4
ENSMUSG00C 4506.931545	0.530764021	0.096370997	5.507507826	3.63949E-08	9.73721E-07	Mybbp1a
ENSMUSG00C 47.29518905	1.745347499	0.317096996	5.504143914	3.70966E-08	9.90792E-07	Rbp7
ENSMUSG00C 76.43163689	1.26254591	0.229752759	5.495237197	3.90186E-08	1.03679E-06	Sptbn2
ENSMUSG00C 157.7528899	0.964946759	0.175779096	5.489542175	4.02977E-08	1.06713E-06	Usp35
ENSMUSG00C 270.6235133	1.279899887	0.233320034	5.485597886	4.12073E-08	1.08616E-06	Irf7
ENSMUSG00C 124.4102705	1.079864329	0.196857243	5.48551993	4.12255E-08	1.08616E-06	Hsh2d
ENSMUSG00C 253.1995558	0.802090665	0.146380816	5.479479407	4.26579E-08	1.11823E-06	Ptk7
ENSMUSG00C 37.11126049	1.840761967	0.336082044	5.477120838	4.32302E-08	1.13132E-06	Adprhl1
ENSMUSG00C 206.0527874	0.774073679	0.141513183	5.469975755	4.50097E-08	1.17198E-06	Selenom
ENSMUSG00C 52.85357326	1.530944659	0.280059549	5.466496915	4.59016E-08	1.19321E-06	Fam49a
ENSMUSG00C 470.3563332	0.636015934	0.116397443	5.464174461	4.65066E-08	1.20692E-06	Gm2a
ENSMUSG00C 2771.554223	0.475857373	0.087092787	5.463797746	4.66055E-08	1.20748E-06	Bclaf1
ENSMUSG00C 202.7992678	0.817934611	0.149802729	5.460078174	4.75925E-08	1.227E-06	Slc23a4
ENSMUSG00C 6001.497386	0.844983895	0.155588653	5.430883806	5.60756E-08	1.43847E-06	Srsf2
ENSMUSG00C 72.40112727	1.443802498	0.265944772	5.428956122	5.66846E-08	1.4517E-06	Timp2
ENSMUSG00C 152.9131166	0.895601638	0.165057376	5.426001897	5.76303E-08	1.47117E-06	Apccdd1
ENSMUSG00C 241.8451074	0.733807761	0.135246685	5.425698689	5.77283E-08	Page 56	Ang

ENSMUSG000 42.08610127	1.841979431	0.339601983	5.423936029	5.83008E-08	1.48069E-06	Golga7b
ENSMUSG000 17.27563881	4.443693135	0.819819652	5.4203301	5.94891E-08	1.63927E-06	Slfn5
ENSMUSG000 7793.477956	0.599922657	0.111026188	5.403433797	6.53771E-08	1.63927E-06	Fasn
ENSMUSG000 181.7421469	0.800972907	0.148405209	5.397202118	6.76881E-08	1.69449E-06	Nrde2
ENSMUSG000 1178.907808	0.538289476	0.099742213	5.39680705	6.78373E-08	1.6955E-06	Pkp1
ENSMUSG000 124.3678449	0.967745314	0.179666348	5.386347122	7.1904E-08	1.78283E-06	Hap1
ENSMUSG000 229.5607839	0.870372734	0.161662623	5.383883541	7.28957E-08	1.79888E-06	Tead2
ENSMUSG000 24.77547032	2.663223149	0.494666352	5.383877715	7.2898E-08	1.79888E-06	Ptpm
ENSMUSG000 72.45087541	1.226070422	0.227843627	5.381192518	7.3994E-08	1.82016E-06	Till1
ENSMUSG000 145.1980249	0.95647693	0.177840605	5.378282036	7.52E-08	1.84026E-06	Smoc1
ENSMUSG000 649.7707134	0.640738407	0.119138841	5.378081588	7.52837E-08	1.84026E-06	Wipi1
ENSMUSG000 1316.58857	0.564407062	0.105149418	5.367667027	7.97616E-08	1.93755E-06	Rapgef1
ENSMUSG000 3471.895579	0.3666726	0.068322565	5.366786207	8.0152E-08	1.944E-06	Sf3b3
ENSMUSG000 583.0624597	0.604234183	0.112670246	5.362854924	8.19168E-08	1.98063E-06	Tmem131l
ENSMUSG000 138.3294635	1.004957813	0.187879382	5.34895208	8.8465E-08	2.12904E-06	Parp3
ENSMUSG000 1224.382034	0.445189587	0.083254495	5.347333961	8.92592E-08	2.14484E-06	Cenpa
ENSMUSG000 544.3107059	0.787595145	0.147518989	5.338940777	9.34912E-08	2.23618E-06	Casc4
ENSMUSG000 710.7016657	0.675653453	0.126631525	5.335586477	9.52362E-08	2.27442E-06	Stra6l
ENSMUSG000 2439.078165	0.390131336	0.073239199	5.326810559	9.99523E-08	2.37612E-06	Smarcc1
ENSMUSG000 929.0484127	0.450708582	0.084634425	5.325357622	1.00755E-07	2.39154E-06	Dhx33
ENSMUSG000 33.11432402	2.180398069	0.409958126	5.318587272	1.04576E-07	2.47095E-06	Slc16a11
ENSMUSG000 237.3754759	0.751463733	0.141300067	5.318212143	1.04792E-07	2.47229E-06	N6amt1
ENSMUSG000 618.7858043	0.597507133	0.112545158	5.309043421	1.10202E-07	2.59208E-06	Dapk2
ENSMUSG000 7251.318619	0.447521034	0.08442073	5.301079875	1.1512E-07	2.69959E-06	Fads1
ENSMUSG000 1788.293265	0.485597338	0.091981247	5.279308056	1.29673E-07	3.02265E-06	Ftsj3
ENSMUSG000 636.8195253	0.705947548	0.13381159	5.275683128	1.32262E-07	3.07841E-06	Tedc1
ENSMUSG000 620.4300516	0.649068491	0.123252733	5.266159028	1.39308E-07	3.23273E-06	Iqgap3
ENSMUSG000 341.3007319	0.610710976	0.116127155	5.25898508	1.44853E-07	3.34835E-06	Exosc1
ENSMUSG000 1001.423184	0.661283076	0.125740313	5.259117445	1.44748E-07	3.34835E-06	Iifo2
ENSMUSG000 1083.671139	0.470900207	0.08963959	5.253261513	1.49429E-07	3.44705E-06	Dtl
ENSMUSG000 45.51018948	1.923448751	0.36639678	5.249633344	1.52402E-07	3.50008E-06	Lncenc1
ENSMUSG000 1741.466342	0.419481468	0.080040516	5.240864132	1.59826E-07	3.64906E-06	Rnase4
ENSMUSG000 19.73649077	2.266110737	0.509424751	5.233571264	1.66266E-07	3.77394E-06	Batf2
ENSMUSG000 440.1206148	0.826338987	0.157955781	5.231457695	1.68179E-07	3.8118E-06	Snhg17
ENSMUSG000 45.6177942	1.559571146	0.298659098	5.221910725	1.77086E-07	3.99625E-06	Lrrc29
ENSMUSG000 692.9501863	0.555986421	0.106661646	5.212618061	1.86194E-07	4.18963E-06	Esp1
ENSMUSG000 149.6441612	1.546335454	0.297063851	5.205397595	1.93582E-07	4.34331E-06	Ifit1
ENSMUSG000 5754.021453	0.452668773	0.087026755	5.201489717	1.97697E-07	4.42928E-06	Lgals3bp
ENSMUSG000 632.4610714	0.620787873	0.119461806	5.196538506	2.03034E-07	4.53578E-06	Ulk1
ENSMUSG000 47.10294739	1.524694043	0.293466601	5.195460185	2.04214E-07	4.55561E-06	Myt1
ENSMUSG000 186.297041	0.891656896	0.171921626	5.186414969	2.14381E-07	4.7484E-06	Gm32742
ENSMUSG000 333.0938496	0.659603127	0.127583781	5.169960638	2.34143E-07	5.14224E-06	Arnt2
ENSMUSG000 19.87090946	2.923624108	0.565885094	5.166462485	2.38566E-07	5.23199E-06	Pgc
ENSMUSG000 1761.357658	0.405070442	0.07842512	5.165059871	2.40362E-07	5.26396E-06	Nsdhl
ENSMUSG000 929.3885162	0.662153085	0.128354022	5.158802791	2.48534E-07	5.42766E-06	Slc9a8
ENSMUSG000 230.0838472	0.686939249	0.133341134	5.151742957	2.58077E-07	5.60462E-06	Ofd1
ENSMUSG000 902.6456475	0.746829885	0.145017659	5.149923754	2.60592E-07	5.65137E-06	S100g
ENSMUSG000 1240.970587	0.492446153	0.095684382	5.146567734	2.65296E-07	5.74537E-06	Cdc25b
ENSMUSG000 180.4128617	0.980522991	0.190723174	5.141079458	2.73164E-07	5.90756E-06	Car12
ENSMUSG000 66.0729742	1.276197088	0.248554739	5.134470963	2.82939E-07	6.10199E-06	Adcy8
ENSMUSG000 101.8532465	1.133442649	0.221409527	5.119213547	3.06812E-07	6.58041E-06	Zdhhc8
ENSMUSG000 985.5967106	0.579279753	0.113244243	5.115313042	3.13221E-07	6.6994E-06	Smpd4
ENSMUSG000 1561.451404	0.658053625	0.128832427	5.107826054	3.25886E-07	6.94169E-06	Fen1
ENSMUSG000 697.1888443	0.622574466	0.121916729	5.106554864	3.28085E-07	6.97899E-06	Deaf1
ENSMUSG000 220.2290755	0.85942288	0.168437714	5.102318588	3.35517E-07	7.09829E-06	H2-Q6
ENSMUSG000 53.71502113	1.611375871	0.315869892	5.101391144	3.37166E-07	7.12349E-06	Bhlhb9
ENSMUSG000 1643.491393	0.467862111	0.091929918	5.089334613	3.59322E-07	7.57105E-06	Mcm4
ENSMUSG000 613.6907531	0.580655142	0.11411108	5.088520458	3.60868E-07	7.59334E-06	Pdx1
ENSMUSG000 14.93366108	3.467579476	0.68194735	5.084819925	3.67975E-07	7.73244E-06	Cdkn2a
ENSMUSG000 2108.3438	0.846096846	0.166418767	5.084143224	3.69289E-07	7.7496E-06	2210407C18Rik
ENSMUSG000 19.070666	2.929707896	0.576870851	5.078620093	3.80186E-07	7.93549E-06	Rbms3
ENSMUSG000 33.16459994	1.74731	0.344207025	5.076334514	3.84786E-07	8.02075E-06	Wfdc2
ENSMUSG000 1100.876885	0.783196533	0.154654997	5.064152764	4.10221E-07	8.50539E-06	Adgrg1
ENSMUSG000 2520.81857	0.391109827	0.077257161	5.062441108	4.13922E-07	8.55933E-06	Etv6
ENSMUSG000 1598.885614	0.449280783	0.088882921	5.05474818	4.30959E-07	8.88803E-06	Ankrd52
ENSMUSG000 29.93914089	2.222014827	0.442079411	5.026279831	5.00086E-07	1.02458E-05	Ifit3
ENSMUSG000 58.51566663	1.379823468	0.274731735	5.022439318	5.10193E-07	1.04118E-05	Cul9
ENSMUSG000 2311.436592	0.455591572	0.090723846	5.02174005	5.12055E-07	1.04361E-05	Al506816
ENSMUSG000 649.6946395	0.4787153	0.095339346	5.021172491	5.1357E-07	1.04453E-05	Prss23
ENSMUSG000 62.62710597	1.215158952	0.242024043	5.020819166	5.14516E-07	1.04453E-05	Ccdc141
ENSMUSG000 1370.800103	0.476350489	0.094909957	5.01897276	5.19485E-07	1.05324E-05	Lig1
ENSMUSG000 599.7433916	0.488784101	0.097481394	5.014127107	5.32748E-07	1.07733E-05	Bmi1
ENSMUSG000 245.9000438	0.760286014	0.15210783	4.998329239	5.78292E-07	1.16489E-05	9930014A18Rik
ENSMUSG000 626.6968284	0.619832001	0.124028007	4.997516431	5.80734E-07	1.1683E-05	Cpn1
ENSMUSG000 193.6235306	0.767607678	0.153637032	4.996241256	5.84585E-07	1.17453E-05	Irf1
ENSMUSG000 48.76571602	1.429665341	0.286534878	4.989498497	6.05362E-07	1.21314E-05	Tcea2
ENSMUSG000 1349.67332	0.644085852	0.129175109	4.986145218	6.15959E-07	1.23008E-05	Slc29a1
ENSMUSG000 317.6261419	0.700196567	0.140486917	4.984069567	6.22607E-07	1.23972E-05	Lfng
ENSMUSG000 1918.92408	0.432981576	0.086933344	4.980615665	6.33823E-07	1.25723E-05	Mcm3
ENSMUSG000 193.3075753	0.807803683	0.162326489	4.976413215	6.47733E-07	1.28156E-05	Tap2
ENSMUSG000 873.9489146	0.455851166	0.091883261	4.961199263	7.00593E-07	1.37485E-05	Suv39h1
ENSMUSG000 360.3539643	0.680779647	0.13731286	4.957872445	7.12693E-07	1.39589E-05	Ifi35
ENSMUSG000 51.17397514	1.342413484	0.27085799	4.956152428	7.19028E-07	1.40653E-05	Nectin4
ENSMUSG000 644.8224722	0.61794228	0.124763349	4.952915144	7.31099E-07	1.42477E-05	Erfe
ENSMUSG000 34.64297178	1.648506869	0.333463578	4.943588979	7.66973E-07	1.48724E-05	Rnf150
ENSMUSG000 264.0844269	0.716156648	0.144892653	4.942670528	7.70597E-07	1.49241E-05	Rsad1
ENSMUSG000 935.9752822	0.569426084	0.115252023	4.940703613	7.78412E-07	1.50567E-05	Ints7
ENSMUSG000 1585.307611	0.57979613	0.117455651	4.936298303	7.96193E-07	1.53435E-05	Mcm7
ENSMUSG000 135.6682844	0.885923706	0.180139497	4.917987013	8.74387E-07	1.67673E-05	Gm19807
ENSMUSG000 585.3474078	0.485848065	0.098804309	4.917276096	8.77567E-07	1.68076E-05	Pspc1
ENSMUSG000 126.207549	1.109106688	0.225590958	4.916450103	8.81276E-07	1.68487E-05	Thbs1
ENSMUSG000 89.53428464	1.019632482	0.207397638	4.916316745	8.81877E-07	1.68487E-05	Capg

ENSMUSG000 1035.843992	0.425354729	0.086590727	4.912243445	9.00402E-07	1.71605E-05	E2f8
ENSMUSG000 443.0968831	0.597358391	0.121779645	4.905240039	9.33132E-07	1.71605E-05	Kit
ENSMUSG000 1545.975016	0.502489327	0.1024615	4.904176966	9.38199E-07	1.77151E-05	Maged1
ENSMUSG000 153.253216	0.814550331	0.166149675	4.902509309	9.46201E-07	1.78233E-05	Spata24
ENSMUSG000 1468.801898	0.40867597	0.083362063	4.90242148	9.46625E-07	1.78233E-05	Scamp5
ENSMUSG000 2458.458987	0.547881735	0.11176466	4.902101758	9.48167E-07	1.78288E-05	Trim25
ENSMUSG000 589.6710468	0.55015857	0.112290885	4.899405421	9.61271E-07	1.79948E-05	Nfrkb
ENSMUSG000 86.03415538	1.297846045	0.264979487	4.897911378	9.68607E-07	1.80841E-05	Vasn
ENSMUSG000 592.1118148	0.528862986	0.108019671	4.895987764	9.78132E-07	1.82183E-05	Cuedc2
ENSMUSG000 1889.713956	0.464784562	0.09517353	4.883548626	1.04193E-06	1.93142E-05	Eftud2
ENSMUSG000 1433.413442	0.414822969	0.085215293	4.867940401	1.12767E-06	2.07553E-05	Rbm33
ENSMUSG000 1163.360407	0.780772056	0.160707278	4.858349094	1.18369E-06	2.17093E-05	Eif5a13-ps
ENSMUSG000 254.7944827	0.631248066	0.130057406	4.853611088	1.21233E-06	2.22085E-05	Eif2s3x
ENSMUSG000 1194.909832	0.432356102	0.089091906	4.852922356	1.21655E-06	2.22596E-05	Ccnb2
ENSMUSG000 1556.87316	0.424342971	0.087453635	4.852205074	1.22096E-06	2.22952E-05	Akap8
ENSMUSG000 290.5955704	0.675613689	0.139240348	4.85214019	1.22136E-06	2.22952E-05	Foxa2
ENSMUSG000 386.5906363	0.670625746	0.138423461	4.844740499	1.26777E-06	2.30344E-05	Hnf1b
ENSMUSG000 874.1033425	0.610764551	0.126188571	4.840094062	1.29778E-06	2.3484E-05	Zswim8
ENSMUSG000 629.0156134	0.508470138	0.105183335	4.834132124	1.33728E-06	2.41283E-05	Blnk
ENSMUSG000 567.5204691	0.549517279	0.113744219	4.831166682	1.35735E-06	2.43495E-05	Exo1
ENSMUSG000 421.3352367	0.643454424	0.13349616	4.820021979	1.43542E-06	2.56613E-05	Mastl
ENSMUSG000 328.0655585	0.56465916	0.11722595	4.816844405	1.45846E-06	2.60433E-05	Golt1b
ENSMUSG000 606.2328965	0.689980746	0.143384574	4.812098865	1.49353E-06	2.65477E-05	Slc25a28
ENSMUSG000 56.30899774	1.717565979	0.356919118	4.812199443	1.49278E-06	2.65477E-05	Cnpy1
ENSMUSG000 42.38122586	1.801038024	0.374559386	4.808417809	1.5213E-06	2.70104E-05	Gm13341
ENSMUSG000 784.8434476	0.585323397	0.121821478	4.804763533	1.54935E-06	2.74146E-05	Slc39a4
ENSMUSG000 559.3457495	0.502344118	0.10457282	4.803773258	1.55703E-06	2.74881E-05	Cdca5
ENSMUSG000 643.6612475	1.134791877	0.236399672	4.800310715	1.5842E-06	2.79044E-05	Muc4
ENSMUSG000 1120.6712	0.437254925	0.091202923	4.794308225	1.63237E-06	2.86235E-05	Flna
ENSMUSG000 328.2930852	0.571421244	0.119332116	4.788495013	1.68037E-06	2.93899E-05	Usp49
ENSMUSG000 350.4939621	0.599125756	0.125196935	4.785466644	1.70591E-06	2.98122E-05	Stard13
ENSMUSG000 416.5644401	0.8495711	0.177887372	4.775893263	1.78911E-06	3.11266E-05	Tnfsf10
ENSMUSG000 25.18278288	2.022625389	0.423702403	4.773693452	1.80878E-06	3.13635E-05	Lipn
ENSMUSG000 216.2869791	0.69143586	0.144906635	4.771595576	1.82772E-06	3.16568E-05	Dgke
ENSMUSG000 2375.452171	0.457041077	0.096207291	4.750586674	2.02827E-06	3.46297E-05	Ncapd2
ENSMUSG000 224.0473946	0.67003357	0.141126501	4.747751599	2.0569E-06	3.50033E-05	Tubb2a
ENSMUSG000 12.73795409	5.062657966	1.06684254	4.745459405	2.08034E-06	3.52864E-05	Cd74
ENSMUSG000 24.6706767	1.969104317	0.41530591	4.741334685	2.12315E-06	3.58953E-05	Mfng
ENSMUSG000 42.76598828	1.398603683	0.296394675	4.718720673	2.37332E-06	3.98652E-05	Atp6v0e2
ENSMUSG000 1272.673667	0.385820883	0.081876831	4.71221076	2.45044E-06	4.10719E-05	Aurkb
ENSMUSG000 392.8131309	0.776503057	0.164849514	4.710375159	2.47261E-06	4.13545E-05	2700081O15Rik
ENSMUSG000 43.44764207	1.556467883	0.331157223	4.700087371	2.6005E-06	4.3215E-05	Aif1l
ENSMUSG000 418.9319847	0.648817587	0.138089993	4.698512718	2.62063E-06	4.3503E-05	Tubgcp2
ENSMUSG000 21.72103632	2.403869966	0.511922399	4.695770236	2.65604E-06	4.40439E-05	Arg1
ENSMUSG000 23.95956212	2.003823953	0.42698826	4.69292517	2.69326E-06	4.45662E-05	Nptx1
ENSMUSG000 139.465427	0.855007783	0.18249645	4.685065293	2.79871E-06	4.61638E-05	Plcg2
ENSMUSG000 1697.189816	0.459118364	0.098064579	4.681796098	2.84372E-06	4.67578E-05	Tcerg1
ENSMUSG000 32.56725881	2.633197734	0.562620234	4.68024002	2.86539E-06	4.70644E-05	Ifi44
ENSMUSG000 365.8306978	0.597016883	0.127578842	4.679591658	2.87447E-06	4.71637E-05	Evl
ENSMUSG000 921.5590078	0.407377067	0.087068961	4.678786339	2.88578E-06	4.72994E-05	Xpo5
ENSMUSG000 767.1730649	0.452981016	0.096949374	4.672345976	2.97779E-06	4.8705E-05	Mcm10
ENSMUSG000 24.75983235	2.021799407	0.433113624	4.668057746	3.0406E-06	4.96281E-05	Noxa1
ENSMUSG000 4036.093869	0.4138194	0.088800084	4.660123997	3.16019E-06	5.14183E-05	Lss
ENSMUSG000 368.5833064	0.577497689	0.123952018	4.659042254	3.17684E-06	5.14741E-05	Tcf7
ENSMUSG000 2779.700624	0.346139525	0.074414293	4.651519353	3.29498E-06	5.32775E-05	Topbp1
ENSMUSG000 31.99079433	1.629383271	0.350774209	4.645105687	3.39902E-06	5.48458E-05	Pde1c
ENSMUSG000 766.2324909	0.442305747	0.095401687	4.636246611	3.54793E-06	5.68947E-05	1110004F10Rik
ENSMUSG000 63.80168325	1.129672769	0.243946162	4.63082822	3.64206E-06	5.82243E-05	Gm45716
ENSMUSG000 1168.310549	0.380239668	0.082131341	4.629653698	3.66278E-06	5.84955E-05	Nek2
ENSMUSG000 1135.457925	0.388771202	0.084120454	4.621601329	3.80789E-06	6.03181E-05	Nudcd3
ENSMUSG000 435.2547978	0.590770501	0.127889965	4.619365563	3.84915E-06	6.09097E-05	Tor1a1p1
ENSMUSG000 218.3405006	0.704300989	0.152493588	4.618561334	3.8641E-06	6.10841E-05	Dll4
ENSMUSG000 306.898697	0.583051805	0.126310114	4.616034195	3.91143E-06	6.17696E-05	Rad51ap1
ENSMUSG000 1447.086263	0.474963555	0.10294287	4.613855763	3.95267E-06	6.22315E-05	Rcc1
ENSMUSG000 1500.875193	0.401351206	0.087033091	4.611478228	3.99816E-06	6.26941E-05	Gnl3
ENSMUSG000 46.17442609	1.335849039	0.290254868	4.602331218	4.17788E-06	6.51842E-05	Tmem173
ENSMUSG000 146.7341153	0.844543965	0.183691822	4.597613314	4.27358E-06	6.66106E-05	Cnnm1
ENSMUSG000 631.9418323	0.460674733	0.10024741	4.595377899	4.31966E-06	6.72614E-05	Ticrr
ENSMUSG000 3515.141342	0.389299342	0.084804467	4.590552281	4.42075E-06	6.86981E-05	Lgr4
ENSMUSG000 1332.973998	0.473408894	0.103333704	4.581359951	4.61962E-06	7.15031E-05	Zc3h7b
ENSMUSG000 294.7902033	0.578864242	0.12638115	4.580305221	4.64298E-06	7.17933E-05	Top3a
ENSMUSG000 214.6819368	0.649964423	0.141999351	4.57723518	4.71162E-06	7.27102E-05	Eme1
ENSMUSG000 3529.767472	0.459382664	0.100379394	4.576463825	4.72901E-06	7.29064E-05	Txnrc5
ENSMUSG000 1801.909032	0.459210552	0.100349387	4.576117143	4.73685E-06	7.2955E-05	Gm
ENSMUSG000 1260.23479	0.609271061	0.133156406	4.575604565	4.74847E-06	7.30616E-05	Arl2bp
ENSMUSG000 1115.234222	0.447322663	0.097856518	4.571209713	4.84917E-06	7.43173E-05	Acss1
ENSMUSG000 39.92795253	1.394539199	0.305205088	4.569187262	4.89619E-06	7.48906E-05	933421A08Rik
ENSMUSG000 133.6398532	0.832820779	0.182436767	4.564983213	4.99534E-06	7.61827E-05	Dock8
ENSMUSG000 9614.560013	0.495441487	0.10872288	4.556920211	5.19091E-06	7.89333E-05	Ddx3x
ENSMUSG000 124.591378	0.861605826	0.189442949	4.548101847	5.41319E-06	8.2233E-05	Amigo3
ENSMUSG000 611.9807137	0.590885264	0.129959427	4.546690268	5.44961E-06	8.27055E-05	Mvk
ENSMUSG000 66.06311394	1.137298779	0.250160271	4.546280563	5.46022E-06	8.27859E-05	Mboat2
ENSMUSG000 53.73075756	1.230025933	0.270734667	4.543289355	5.53831E-06	8.38067E-05	Fgr
ENSMUSG000 163.6726763	0.963923727	0.212260136	4.541237684	5.59249E-06	8.44624E-05	Rab10os
ENSMUSG000 2694.802035	0.348797629	0.076946864	4.532967418	5.81608E-06	8.76691E-05	Dnmt1
ENSMUSG000 18.71853107	2.514322117	0.554733279	4.532488335	5.82929E-06	8.77203E-05	Ptpr
ENSMUSG000 3027.834637	0.409630155	0.090377487	4.532435765	5.83074E-06	8.77203E-05	Dhcr7
ENSMUSG000 158.6149156	0.798221889	0.176376615	4.525667364	6.02052E-06	9.0488E-05	Runx1
ENSMUSG000 377.5389871	0.573163102	0.126706004	4.523567037	6.0806E-06	9.13029E-05	Slc2a5
ENSMUSG000 181.1900048	0.721366791	0.159487161	4.52303989	6.09577E-06	9.14425E-05	Adgre5
ENSMUSG000 112.8124357	1.752265829	0.388442106	4.511008976	6.452E-06	9.65073E-05	Ddx60
ENSMUSG000 310.0277034	0.572884131	0.12711348	4.506871576	6.57904E-06	9.65073E-05	Cd276

ENSMUSG000 858.0536221	0.617830346	0.13727757	4.500592102	6.77644E-06	0.000100835	Nld6
ENSMUSG000 22.47187653	2.016025519	0.44795843	4.500474559	6.78019E-06	0.000100835	Nld6
ENSMUSG000 841.5563847	0.416346957	0.092534832	4.499353909	6.81603E-06	0.000101175	Urb2
ENSMUSG000 3422.171759	0.413829202	0.09203828	4.496272673	6.9155E-06	0.000102359	Sf1
ENSMUSG000 1925.985352	0.493373283	0.109823931	4.492402314	7.04242E-06	0.000103941	Dpp3
ENSMUSG000 956.2572817	0.631816271	0.140689414	4.490858656	7.09366E-06	0.000104499	Ppan
ENSMUSG000 44.62565554	1.53324954	0.341856288	4.485291062	7.28145E-06	0.000106861	Cited4
ENSMUSG000 275.5692744	0.84845978	0.189198786	4.484488492	7.30891E-06	0.000107163	Frat2
ENSMUSG000 871.5161274	0.433373462	0.096749785	4.479322216	7.48804E-06	0.000109377	Tapbp
ENSMUSG000 272.2674956	0.578346391	0.12915888	4.477790375	7.54196E-06	0.000109651	Hmgb3
ENSMUSG000 845.7289577	0.490080067	0.109441976	4.47798993	7.53492E-06	0.000109651	Galnt10
ENSMUSG000 91.28666162	0.922040447	0.205908235	4.477919232	7.53741E-06	0.000109651	BC049987
ENSMUSG000 24.82805634	1.843835878	0.411992722	4.475408857	7.62652E-06	0.000110777	Tenm4
ENSMUSG000 522.4198692	0.50459566	0.112933586	4.46807437	7.89269E-06	0.000114087	Stil
ENSMUSG000 98.25391524	1.220799567	0.273236643	4.467920385	7.89837E-06	0.000114087	D930048N14Rik
ENSMUSG000 1460.111296	0.418215265	0.093615791	4.467358149	7.91915E-06	0.000114281	Incenp
ENSMUSG000 639.9923351	0.440486077	0.098684623	4.463573606	8.06039E-06	0.000116153	Mkrm2os
ENSMUSG000 30.95290653	1.576908183	0.353375148	4.46241959	8.10393E-06	0.000116516	Shroom1
ENSMUSG000 26.04254875	1.79454397	0.402306311	4.460640863	8.17149E-06	0.00011727	Slc16a9
ENSMUSG000 20.7177415	2.269866944	0.509709876	4.453252825	8.45791E-06	0.000120935	Usp18
ENSMUSG000 402.4356199	0.519762004	0.116796581	4.450147436	8.58114E-06	0.000122248	Nrm
ENSMUSG000 98.30041137	0.879332259	0.19765571	4.448807762	8.63483E-06	0.0001229	Celsr1
ENSMUSG000 25.44023868	1.838767248	0.413401614	4.44789567	8.67156E-06	0.000123198	Rpl28-ps1
ENSMUSG000 3821.88896	0.487166042	0.109587694	4.445444762	8.77102E-06	0.000124384	Fads2
ENSMUSG000 443.7033073	0.687440315	0.154716655	4.443221167	8.8622E-06	0.000125448	Cbx7
ENSMUSG000 1790.036846	0.616308326	0.138747813	4.441931813	8.91548E-06	0.000125974	Rgmb
ENSMUSG000 944.2818548	0.530698964	0.119582376	4.437936276	9.08255E-06	0.000127906	Pelp1
ENSMUSG000 1144.898549	0.408740109	0.092160859	4.435072717	9.20412E-06	0.000129268	Hsd17b7
ENSMUSG000 370.1005705	0.599017302	0.135162247	4.431838872	9.34328E-06	0.000131019	Slc35b3
ENSMUSG000 227.2361483	0.648734253	0.146384182	4.43172374	9.34827E-06	0.000131019	9930104L06Rik
ENSMUSG000 880.3808526	0.472729319	0.106836648	4.424786122	9.65379E-06	0.000134574	Ptprs
ENSMUSG000 194.7463032	0.844443613	0.190877364	4.424011279	9.6885E-06	0.000134847	Fzd2
ENSMUSG000 10.75663026	4.789589447	1.083521917	4.42039	9.85229E-06	0.000136915	ltgae
ENSMUSG000 814.9319584	0.420493094	0.095215013	4.416247841	1.00429E-05	0.000139374	Pisd
ENSMUSG000 405.1344782	0.533193742	0.120914695	4.409668651	1.03529E-05	0.000142701	Ttf2
ENSMUSG000 17.24963257	2.325783524	0.528091823	4.40412713	1.06211E-05	0.000145967	Chrna4
ENSMUSG000 312.7856446	0.639360579	0.145241716	4.402045067	1.07235E-05	0.000147245	Zdhhc4
ENSMUSG000 28.26104086	1.729389185	0.39337316	4.396307023	1.10108E-05	0.000150791	Adgrv1
ENSMUSG000 1116.644794	0.361585561	0.082339197	4.391414731	1.12615E-05	0.000153757	Asxl1
ENSMUSG000 1119.681342	0.441845498	0.100780437	4.384238749	1.16392E-05	0.000158007	Gm2223
ENSMUSG000 41.53255017	1.441675494	0.328859771	4.383860902	1.16594E-05	0.000158144	Nuak1
ENSMUSG000 1294.440793	0.393223152	0.089733559	4.382119214	1.1753E-05	0.000158998	Mkl2
ENSMUSG000 17.98868918	2.424584741	0.55346885	4.380706776	1.18295E-05	0.000159893	Snx22
ENSMUSG000 1487.855645	0.353266791	0.080654417	4.380005503	1.18676E-05	0.00016027	Rab3d
ENSMUSG000 714.5708801	0.426591211	0.097510541	4.374821483	1.21532E-05	0.000163984	lkbkap
ENSMUSG000 85.89928819	1.125275428	0.257335041	4.372802947	1.22661E-05	0.000165365	Slc6a7
ENSMUSG000 25.78459037	1.692874596	0.387155241	4.372598933	1.22776E-05	0.000165376	Gxylt2
ENSMUSG000 878.0255435	0.439815625	0.100625671	4.37080935	1.23787E-05	0.000166449	Kat2a
ENSMUSG000 546.9586206	0.459216487	0.105116375	4.36864845	1.25018E-05	0.00016796	Srl
ENSMUSG000 438.9726141	0.581660155	0.133317747	4.362961196	1.28314E-05	0.000171954	Sema5a
ENSMUSG000 703.9029306	0.43466869	0.099705795	4.359512808	1.30352E-05	0.000174374	Dna2
ENSMUSG000 50.80792079	1.209300312	0.277582638	4.356541612	1.32134E-05	0.000176454	Abcc8
ENSMUSG000 1088.307101	0.396967921	0.091287945	4.348525114	1.37056E-05	0.000182468	C130074G19Rik
ENSMUSG000 911.3697395	0.44802935	0.103032064	4.348445828	1.37106E-05	0.000182468	Dach1
ENSMUSG000 369.8490292	0.588363468	0.135316052	4.348068539	1.37342E-05	0.000182626	Samd10
ENSMUSG000 213.4637005	0.817568848	0.188779393	4.330816177	1.48558E-05	0.000196199	Zfp512b
ENSMUSG000 203.0302797	0.63376413	0.146368488	4.329921946	1.49162E-05	0.000196831	Inpp5k
ENSMUSG000 456.143594	0.688755434	0.159174424	4.327048381	1.51121E-05	0.000199247	Ube2i
ENSMUSG000 468.0553217	0.451362981	0.104321348	4.326659771	1.51388E-05	0.000199331	Rfc3
ENSMUSG000 2668.160793	0.303262319	0.070172534	4.321666915	1.54855E-05	0.000203254	Zdhhc3
ENSMUSG000 600.2913342	0.764800827	0.176974127	4.321540319	1.54944E-05	0.000203254	Gm6627
ENSMUSG000 15.0880306	2.419727265	0.561078336	4.312637127	1.61319E-05	0.000210822	Tsply4
ENSMUSG000 504.6945747	0.469790703	0.109064135	4.307471946	1.65131E-05	0.000215529	Ufd1
ENSMUSG000 284.8856376	0.60627728	0.140758324	4.307221486	1.65318E-05	0.000215592	Frmd4b
ENSMUSG000 580.03519	0.434360896	0.100867315	4.306260109	1.66038E-05	0.000216239	Rasa3
ENSMUSG000 1644.846589	0.443823178	0.103167678	4.301959556	1.69294E-05	0.000219983	Ddx39
ENSMUSG000 45.89420981	1.353627192	0.315126984	4.295497567	1.74302E-05	0.000225607	Rims4
ENSMUSG000 331.109183	0.52505186	0.122529109	4.285119381	1.82641E-05	0.000235228	Dsn1
ENSMUSG000 1515.828372	0.36362613	0.085066338	4.274618369	1.91465E-05	0.000245577	Golim4
ENSMUSG000 1070.055764	0.429006692	0.100413841	4.27238601	1.93392E-05	0.000247755	Agmat
ENSMUSG000 33.15069437	1.535345922	0.359779047	4.267468974	1.97703E-05	0.000252331	CT030170.4
ENSMUSG000 521.5295264	0.516710324	0.121155365	4.264857145	2.0003E-05	0.000254883	Chaf1b
ENSMUSG000 5511.129525	0.357429245	0.083880193	4.261187679	2.03343E-05	0.000258893	Prpf8
ENSMUSG000 729.1647584	0.435987499	0.102376103	4.25868426	2.05634E-05	0.000261168	Ogrf
ENSMUSG000 718.8018134	0.398077915	0.093527815	4.256251624	2.07883E-05	0.000263809	Dock9
ENSMUSG000 388.5204743	0.555850859	0.130733191	4.251795998	2.12063E-05	0.000268458	Fgfr3
ENSMUSG000 131.6106885	0.744968285	0.175259228	4.250665111	2.13137E-05	0.000269598	Faxc
ENSMUSG000 373.4359836	0.489497128	0.11520924	4.248766213	2.14951E-05	0.000271507	Fanca
ENSMUSG000 107.5382574	0.839252457	0.19753062	4.248720822	2.14995E-05	0.000271507	Klk1
ENSMUSG000 219.0671599	0.618706996	0.145697078	4.246529873	2.17107E-05	0.000273952	Fkbp11
ENSMUSG000 25.50219176	2.186087091	0.51485695	4.246008706	2.17612E-05	0.000274368	Olfrl2a
ENSMUSG000 508.6967415	0.487650816	0.114855377	4.245781332	2.17833E-05	0.000274424	Ddx51
ENSMUSG000 563.8710515	0.441964918	0.104127633	4.244453721	2.19127E-05	0.000275607	Zhx3
ENSMUSG000 285.7041096	0.824043582	0.194285816	4.241398568	2.22131E-05	0.000278487	Zbed3
ENSMUSG000 10.38495021	4.611695173	1.088136317	4.238159412	2.2536E-05	0.000281854	Silf8
ENSMUSG000 317.5656127	0.524844359	0.123926111	4.235139431	2.2841E-05	0.000285439	Mcm9
ENSMUSG000 197.8209392	0.627483824	0.148210973	4.233720434	2.29857E-05	0.000286557	Palb2
ENSMUSG000 77.61282335	0.952767704	0.225098152	4.232676705	2.30926E-05	0.00028766	Fuz
ENSMUSG000 219.6855095	0.590790087	0.139798081	4.225444891	2.38469E-05	0.000296345	Mob3c
ENSMUSG000 21.93544035	1.904897109	0.451124264	4.222555202	2.41548E-05	0.000299454	AY761184
ENSMUSG000 251.6736296	0.559012031	0.13241154	4.221777265	2.42384E-05	0.000300251	Nr2f2
ENSMUSG000 368.3510444	0.576207329	0.13654376	4.219946251	2.44361E-05	0.000300251	Slc27a1



ENSMUSG00C 1462.736721	0.347603178	0.082498428	4.213452136	2.51497E-05	0.000310306	Mlxip
ENSMUSG00C 926.3286894	0.425062523	0.101025508	4.207477236	2.58237E-05	0.000310306	Prpf31
ENSMUSG00C 1203.561087	0.382668146	0.091065172	4.202135019	2.64409E-05	0.000325207	Brd8
ENSMUSG00C 760.7879676	0.57363864	0.136654797	4.197720475	2.69615E-05	0.000330063	Kdm6a
ENSMUSG00C 11.84368865	2.883226449	0.686857207	4.197708663	2.69629E-05	0.000330063	D630003M21Rik
ENSMUSG00C 2053.381689	0.605701986	0.144306916	4.197317786	2.70095E-05	0.000330373	Engase
ENSMUSG00C 451.769044	0.483747921	0.115553631	4.186349802	2.83476E-05	0.000344845	Pdpr
ENSMUSG00C 1432.424765	0.806910966	0.192742274	4.18647632	2.83318E-05	0.000344845	Rnf213
ENSMUSG00C 469.4381095	0.526422423	0.125783298	4.185153615	2.84973E-05	0.000346125	Trip13
ENSMUSG00C 360.6498086	0.727812269	0.174061587	4.181349148	2.89784E-05	0.000351694	Gm5809
ENSMUSG00C 17.6770271	2.12612567	0.509043095	4.176710558	2.95755E-05	0.00035866	Prss41
ENSMUSG00C 85.83383942	0.850490654	0.203731455	4.174567226	2.98553E-05	0.000360929	Crym
ENSMUSG00C 379.0701973	0.592774829	0.142032938	4.173502538	2.99952E-05	0.000362296	Ndor1
ENSMUSG00C 612.5290019	0.462001384	0.110702677	4.1733533	3.00149E-05	0.000362296	lqsec1
ENSMUSG00C 72.46965136	0.95590939	0.229072148	4.172962094	3.00665E-05	0.000362524	Akr1b3
ENSMUSG00C 458.6527011	0.719740583	0.172481467	4.172857488	3.00803E-05	0.000362524	Haus4
ENSMUSG00C 6943.401337	0.268122897	0.064265969	4.172082087	3.01829E-05	0.000363479	Sephs2
ENSMUSG00C 432.1134351	0.503266425	0.120796378	4.166237705	3.09668E-05	0.000372055	Pbdc1
ENSMUSG00C 136.8995388	0.703295002	0.168954062	4.162640378	3.14589E-05	0.000377095	Syt7
ENSMUSG00C 28.59710727	1.498083726	0.360133477	4.159801354	3.18525E-05	0.00038064	Nxf7
ENSMUSG00C 498.9287333	0.516797522	0.124244187	4.159530783	3.18902E-05	0.000380799	Fgfr1
ENSMUSG00C 9.692030634	0.592774829	0.142032938	4.158927473	3.19745E-05	0.000381514	Gm830
ENSMUSG00C 298.5137422	0.553746885	0.133240287	4.156001898	3.23865E-05	0.000385249	Plpp3
ENSMUSG00C 64.00077311	1.033850818	0.248865496	4.154255346	3.26349E-05	0.000387906	Rem2
ENSMUSG00C 709.2108738	0.404451036	0.097378477	4.153392497	3.27582E-05	0.000389076	L3mbtl2
ENSMUSG00C 90.4175899	0.961296551	0.231556993	4.151446855	3.3038E-05	0.000390611	Dnajc27
ENSMUSG00C 1766.51648	0.33289389	0.080214417	4.1500506	3.32402E-05	0.000392703	Tsr1
ENSMUSG00C 10.02960367	3.355504257	0.809032468	4.147552032	3.36049E-05	0.000396659	Cap2
ENSMUSG00C 308.8830186	1.141314026	0.275187259	4.147408683	3.3626E-05	0.000396659	Parp14
ENSMUSG00C 761.0232849	0.399777684	0.096436803	4.145488775	3.3909E-05	0.000399695	Tk1
ENSMUSG00C 301.7969006	0.593922059	0.143421	4.141109459	3.4563E-05	0.000406378	Tubb2a-ps2
ENSMUSG00C 230.8553546	0.650337168	0.157107591	4.139438224	3.48157E-05	0.000408835	Cand2
ENSMUSG00C 154.5732402	0.67991646	0.1643698	4.136504753	3.52636E-05	0.00041316	Fan1
ENSMUSG00C 68.90242105	1.049008787	0.253628532	4.136004639	3.53405E-05	0.00041375	Pla2g1b
ENSMUSG00C 441.8114142	0.462637867	0.11200675	4.130446297	3.6206E-05	0.000422611	Notch2
ENSMUSG00C 875.6041551	0.397785337	0.096327938	4.129490851	3.63567E-05	0.000424053	Foxk1
ENSMUSG00C 33.66222759	1.389904288	0.337147975	4.122534879	3.74726E-05	0.000435762	Kmo
ENSMUSG00C 148.4801765	0.778746022	0.188975751	4.120878046	3.77431E-05	0.000438254	Asb16
ENSMUSG00C 1541.712839	0.334576907	0.081204431	4.120180429	3.78576E-05	0.000439255	Dxd42
ENSMUSG00C 199.6947939	0.681919426	0.165639821	4.116880976	3.84034E-05	0.000444925	Bckdha
ENSMUSG00C 890.9537539	0.433799318	0.105392033	4.116054184	3.85414E-05	0.000446192	Ddh2
ENSMUSG00C 949.6618074	0.357779344	0.087041383	4.11045106	3.94887E-05	0.00045648	Nup155
ENSMUSG00C 918.411662	0.416765917	0.101420213	4.109298373	3.96863E-05	0.000458424	Nup93
ENSMUSG00C 51.19153808	1.099990819	0.267700803	4.1090307	3.97323E-05	0.000458615	Lingo3
ENSMUSG00C 675.5293362	0.390851478	0.095134839	4.108394808	3.98419E-05	0.000459539	Myo9b
ENSMUSG00C 270.0601819	0.528206439	0.128762046	4.102190487	4.09257E-05	0.000470646	Slc39a6
ENSMUSG00C 29.59300909	1.759226716	0.428920639	4.101520317	4.10444E-05	0.000471663	Gm15501
ENSMUSG00C 48.65573264	1.134946146	0.277517801	4.089633683	4.32055E-05	0.000494308	Nptxr
ENSMUSG00C 499.703312	0.454311742	0.111101259	4.089168269	4.32923E-05	0.000494937	Mis18a
ENSMUSG00C 43.31008764	1.308949494	0.320181731	4.088145467	4.34835E-05	0.000496395	Wasf1
ENSMUSG00C 1054.183496	0.465800132	0.113937524	4.088206559	4.34721E-05	0.000496395	Arid1b
ENSMUSG00C 247.1490947	0.764948137	0.187325734	4.083518702	4.43589E-05	0.000505646	Ankrd16
ENSMUSG00C 541.4158783	0.435252982	0.106657339	4.080853551	4.48706E-05	0.000510436	Tubgcp3
ENSMUSG00C 984.0144073	0.361294061	0.088534713	4.080818139	4.48775E-05	0.000510436	Atxn1l
ENSMUSG00C 5062.04783	0.325181321	0.079713113	4.079395596	4.51529E-05	0.000512446	Dhx9
ENSMUSG00C 850.7225085	0.373316852	0.091522014	4.078984251	4.52329E-05	0.00051298	Smad5
ENSMUSG00C 984.4721794	0.895265075	0.219556896	4.077599431	4.55031E-05	0.000515668	Leng8
ENSMUSG00C 46.9054153	1.140012949	0.280064506	4.070537058	4.69049E-05	0.000531168	2810429104Rik
ENSMUSG00C 138.9075546	0.772969701	0.190006196	4.068128912	4.73922E-05	0.000535129	Ica1
ENSMUSG00C 20.92161701	2.153038498	0.529487834	4.066266229	4.77724E-05	0.000539031	Slfn10-ps
ENSMUSG00C 857.6679477	0.379537155	0.09334759	4.065848446	4.7858E-05	0.000539607	Heatr1
ENSMUSG00C 417.4123638	0.488693249	0.120264058	4.063502067	4.83419E-05	0.000544274	As3mt
ENSMUSG00C 4931.033342	0.353030334	0.086924292	4.061354151	4.87889E-05	0.000548514	Sfpq
ENSMUSG00C 247.842749	0.588706603	0.14512003	4.056687448	4.97736E-05	0.000557572	Per3
ENSMUSG00C 18.74189741	1.881862368	0.464049814	4.055302494	5.00695E-05	0.00056008	B4galt2
ENSMUSG00C 225.7409187	0.554211403	0.136711154	4.053885781	5.03738E-05	0.000562836	E2f7
ENSMUSG00C 15.49917435	2.325403857	0.57389471	4.05196949	5.07883E-05	0.000565853	Btdb17
ENSMUSG00C 297.8881916	0.523819256	0.129277462	4.051899288	5.08035E-05	0.000565853	Ky
ENSMUSG00C 179.9471683	0.62016687	0.153046874	4.052136801	5.0752E-05	0.000565853	Zfp956
ENSMUSG00C 16.19102371	2.336114583	0.576675961	4.051000458	5.09991E-05	0.000567625	Snai2
ENSMUSG00C 1118.17704	0.363418635	0.089727699	4.050239108	5.11653E-05	0.000569068	Tmem209
ENSMUSG00C 313.0411108	0.654225941	0.161549969	4.049681634	5.12874E-05	0.000570018	Tnfrsf1b
ENSMUSG00C 84.52113834	0.944419234	0.233498063	4.04465554	5.24001E-05	0.000581555	Fam221a
ENSMUSG00C 333.4535892	0.529086519	0.130834356	4.043941772	5.256E-05	0.000582499	Tap1
ENSMUSG00C 6205.720541	0.538511254	0.133371031	4.037692806	5.39795E-05	0.00059611	Apoa4
ENSMUSG00C 470.1441538	0.667914394	0.16546445	4.03660359	5.42306E-05	0.000598034	Rrp12
ENSMUSG00C 1016.976534	0.381627528	0.094588073	4.034626318	5.46893E-05	0.000602239	Thoc3
ENSMUSG00C 9.601995738	3.283736874	0.814665165	4.030781006	5.55918E-05	0.000610882	Grip1
ENSMUSG00C 246.0440324	0.57989563	0.144105769	4.024097261	5.71943E-05	0.000625841	Il1rap
ENSMUSG00C 1399.664296	0.49201965	0.122412826	4.019347217	5.83596E-05	0.000634579	Nhp2
ENSMUSG00C 324.2005183	0.714023036	0.177774525	4.016453065	5.90806E-05	0.000641523	Gm5124
ENSMUSG00C 22.21269055	1.735107739	0.432124289	4.015297875	5.93708E-05	0.000643776	Pld6
ENSMUSG00C 62.1031131	1.017279927	0.2534199	4.014206969	5.9646E-05	0.000645412	Trip6
ENSMUSG00C 3603.39485	0.304379064	0.075821997	4.014389981	5.95997E-05	0.000645412	Gm12183
ENSMUSG00C 763.3179327	0.498011702	0.124151207	4.011331944	6.03771E-05	0.00065281	Phf12
ENSMUSG00C 530.7001334	0.465881194	0.116158698	4.010730151	6.05313E-05	0.000653628	Cit
ENSMUSG00C 941.2655821	0.412582863	0.102890725	4.009913065	6.07411E-05	0.000654986	Foxm1
ENSMUSG00C 554.7667093	0.411631397	0.102687501	4.008583246	6.10841E-05	0.000657319	Sdcbp2
ENSMUSG00C 8.664793149	4.489761604	1.120569248	4.006679294	6.15784E-05	0.000660811	Cacna1g
ENSMUSG00C 613.308019	0.521981329	0.130357213	4.004238181	6.22177E-05	0.000666294	Med24
ENSMUSG00C 1943.214155	0.339778739	0.084908996	4.001681243	6.2894E-05	0.000672611	Cdca3
ENSMUSG00C 167.7118264	0.625191992	0.156274171	4.000609871	6.31794E-05	0.000672611	Xkr5

ENSMUSG00C 499.6390687	0.501250885	0.125335517	3.999272489	6.35375E-05	0.000678096	Smardc1
ENSMUSG00C 205.151401	0.898460476	0.225243631	3.98883853	6.63976E-05	0.00053	Viپر1
ENSMUSG00C 458.7504376	0.54029552	0.13558878	3.984809934	6.75342E-05	0.000716331	Dock11
ENSMUSG00C 31.48215659	1.475557194	0.3703855	3.983841683	6.78101E-05	0.000718279	2700038G22Rik
ENSMUSG00C 285.5150538	0.534343595	0.134217699	3.981170886	6.85766E-05	0.000725412	Cracr2a
ENSMUSG00C 564.0231674	0.435096641	0.109414916	3.976575191	6.99149E-05	0.000738064	Prdx4
ENSMUSG00C 128.3883381	0.807044892	0.203142938	3.972793256	7.10347E-05	0.000748364	Tsply2
ENSMUSG00C 580.4522924	0.381620275	0.096069986	3.972315278	7.11774E-05	0.00074936	Kat5
ENSMUSG00C 602.1114483	0.459539681	0.115776432	3.969198868	7.21147E-05	0.000758202	Rcl1
ENSMUSG00C 235.8078905	0.612373931	0.154331493	3.967912962	7.25048E-05	0.000760763	Dnph1
ENSMUSG00C 77.60394904	0.882037238	0.222319833	3.967424878	7.26534E-05	0.000761809	Ptpu
ENSMUSG00C 529.3476795	0.539201496	0.135923884	3.966937094	7.28022E-05	0.000762855	Nubp2
ENSMUSG00C 283.7537464	0.585318326	0.147562284	3.966584898	7.29098E-05	0.000763048	Cep83os
ENSMUSG00C 83.03364024	0.896460471	0.226126536	3.964419591	7.35747E-05	0.000769397	Dmwd
ENSMUSG00C 330.0270927	0.547586035	0.138136346	3.964098174	7.36739E-05	0.000769917	Taf8
ENSMUSG00C 23.76566768	1.674626812	0.42262191	3.96247041	7.41782E-05	0.000774667	BC067074
ENSMUSG00C 436.1181081	0.469139563	0.118577445	3.956397965	7.60884E-05	0.000792669	Zfp326
ENSMUSG00C 1158.281675	0.563632559	0.142462989	3.956343784	7.61056E-05	0.000792669	Ints1
ENSMUSG00C 191.7355053	0.608283933	0.153785219	3.955412206	7.64028E-05	0.000795233	Spire1
ENSMUSG00C 1257.415474	0.342090331	0.086524871	3.953664753	7.69632E-05	0.000800531	Pdcd11
ENSMUSG00C 551.7318012	0.444795125	0.112542989	3.952224195	7.74281E-05	0.000804829	Rtn4r1
ENSMUSG00C 1221.849878	0.433812001	0.109782934	3.951543151	7.76489E-05	0.000806585	Cd44
ENSMUSG00C 554.7068886	0.428571226	0.108528149	3.948940714	7.84978E-05	0.000813233	Zbtb39
ENSMUSG00C 5670.943229	0.277696312	0.070390427	3.945086332	7.97712E-05	0.000824232	H3f3b
ENSMUSG00C 21.2988563	1.688952956	0.428170828	3.944577362	7.99408E-05	0.000825437	Gcgr
ENSMUSG00C 48.07721074	1.140338792	0.289231249	3.942654183	8.05848E-05	0.000831535	Alpk1
ENSMUSG00C 126.0044039	0.833965888	0.211561982	3.941945906	8.08232E-05	0.000832891	Aim2
ENSMUSG00C 22.20677121	1.833467679	0.466082902	3.933780174	8.36203E-05	0.000858873	Pltp
ENSMUSG00C 109.5896795	0.749003801	0.190544394	3.930862447	8.46417E-05	0.000868791	Tacc1
ENSMUSG00C 283.9605396	0.528595916	0.134698965	3.924276008	8.6991E-05	0.000888803	Meis2
ENSMUSG00C 474.8267922	0.426201612	0.108639288	3.923089147	8.74208E-05	0.000892024	Tbc1d9
ENSMUSG00C 49.07263163	1.276950771	0.325602272	3.921811607	8.78857E-05	0.000894424	AL672194.1
ENSMUSG00C 13.51579694	2.402285953	0.612706869	3.92077529	8.82645E-05	0.000896521	Mx2
ENSMUSG00C 15.65174949	2.311094971	0.589511504	3.920356015	8.84183E-05	0.000897497	Ifit3b
ENSMUSG00C 10.74792471	2.820223747	0.719448943	3.919977609	8.85572E-05	0.000898322	Bglap3
ENSMUSG00C 1911.835629	0.598105959	0.152598452	3.919475927	8.87417E-05	0.000899022	Mcm5
ENSMUSG00C 302.6933629	0.534112685	0.136269514	3.919531723	8.87212E-05	0.000899022	Haus1
ENSMUSG00C 887.4856722	0.409870957	0.104583092	3.9190939	8.88825E-05	0.000899278	Pcif1
ENSMUSG00C 43.52380057	1.115226013	0.284598151	3.91859894	8.90652E-05	0.000899957	Gm11423
ENSMUSG00C 1115.161647	0.503336044	0.128766088	3.908917722	9.27105E-05	0.000933158	Grb7
ENSMUSG00C 11.71120423	2.529893061	0.647343857	3.908113185	9.30197E-05	0.000935061	Hist3h2ba
ENSMUSG00C 84.69697324	1.146169428	0.294034598	3.898076747	9.69597E-05	0.000972157	Ifit2
ENSMUSG00C 8.951334703	3.525259125	0.904604832	3.89701558	9.73854E-05	0.000975169	Adams1
ENSMUSG00C 1571.345626	0.487745454	0.125170077	3.896661777	9.75277E-05	0.000975966	Lmn2
ENSMUSG00C 92.28472667	0.947425186	0.243274651	3.894467353	9.84147E-05	0.000983579	Tpsti
ENSMUSG00C 129.9771034	0.755824423	0.194185199	3.89228648	9.93039E-05	0.000991193	Gadd45g
ENSMUSG00C 339.0025185	0.457164515	0.117532481	3.889686594	0.000100374	0.001000589	Nsl1
ENSMUSG00C 314.9355902	0.477862961	0.122887994	3.888605762	0.000100822	0.001004412	Slc44a2
ENSMUSG00C 1329.384064	0.363898159	0.093624605	3.886779122	0.000101583	0.001011349	Polr1a
ENSMUSG00C 1323.908502	0.343572433	0.088582454	3.878560769	0.000105076	0.001044791	Birc5
ENSMUSG00C 31.95365337	1.406090997	0.362550667	3.87832964	0.000105176	0.001045117	Notch4
ENSMUSG00C 616.5868636	0.373537683	0.096349536	3.876901734	0.000105795	0.001050596	Smg6
ENSMUSG00C 279.9452878	0.530737153	0.137033694	3.873041283	0.000107486	0.001064668	Gm17230
ENSMUSG00C 194.0537232	0.664167242	0.171517409	3.872302207	0.000107812	0.001067224	Nprl3
ENSMUSG00C 438.843229	0.440978707	0.113910046	3.871288975	0.000108261	0.00107031	Tarbp1
ENSMUSG00C 501.6078754	0.418680506	0.108221517	3.868736237	0.000109401	0.001079519	Def8
ENSMUSG00C 86.97019868	0.865202829	0.223630884	3.868887945	0.000109333	0.001079519	Gm933
ENSMUSG00C 1184.594675	0.458183134	0.118571833	3.864181941	0.000111462	0.001097771	Paxip1
ENSMUSG00C 23.17615405	1.616596777	0.418389098	3.863859707	0.000111609	0.001098527	Vsig1
ENSMUSG00C 1449.346422	0.433282362	0.112261822	3.859570019	0.000113587	0.001115873	Apxe1
ENSMUSG00C 1069.686196	0.332129751	0.086117912	3.856686055	0.000114935	0.001126982	Tacc3
ENSMUSG00C 565.8764192	0.433222059	0.11237419	3.855174023	0.000115647	0.001133257	Scmh1
ENSMUSG00C 89.92253349	0.885693305	0.229842747	3.853475114	0.000116453	0.001139002	Glns-ps1
ENSMUSG00C 781.2976293	0.424776905	0.110385503	3.848122213	0.000119027	0.001161984	Acpp
ENSMUSG00C 969.8574996	0.398449734	0.103549943	3.847899097	0.000119135	0.001162314	Cpsf7
ENSMUSG00C 537.1940112	0.394776637	0.10259949	3.847744628	0.00011921	0.001162318	Nfxl1
ENSMUSG00C 1204.76909	0.347038425	0.090233857	3.845989057	0.000120067	0.001169209	Gm12966
ENSMUSG00C 1149.294931	0.349118018	0.090791766	3.84526081	0.000120424	0.001171954	Nom1
ENSMUSG00C 66.04119432	1.025520613	0.266716111	3.844989371	0.000120558	0.001172519	Pcdhgb6
ENSMUSG00C 73.71189721	0.899704284	0.234091079	3.843394158	0.000121344	0.001179434	Rtl5
ENSMUSG00C 311.804541	0.519907508	0.135533875	3.835996782	0.000125056	0.001212483	Smtm
ENSMUSG00C 1912.520484	0.28076179	0.07330392	3.830106111	0.000128088	0.001240335	Uhrf1
ENSMUSG00C 584.4636355	0.430411185	0.11245896	3.827273404	0.000129571	0.001253133	Wdh1
ENSMUSG00C 5028.22535	0.265104357	0.069281214	3.826496996	0.00012998	0.001256309	Lrrc59
ENSMUSG00C 614.2479819	0.510227776	0.133563878	3.820103045	0.000133396	0.00128773	Adam15
ENSMUSG00C 345.5185498	0.490266564	0.128346445	3.819868687	0.000133523	0.001288155	Sass6
ENSMUSG00C 364.0395663	0.446319431	0.116870446	3.81892469	0.000134035	0.001292293	Mrps10
ENSMUSG00C 406.4771327	0.546149932	0.143216612	3.813453796	0.000137038	0.001314739	Fam45a
ENSMUSG00C 128.9913873	0.699235463	0.183418082	3.812249348	0.000137708	0.001319538	Mkl1
ENSMUSG00C 66.18898574	0.95682101	0.25106821	3.811000243	0.000138406	0.001323808	Zfp951
ENSMUSG00C 3282.187825	0.269652314	0.070826921	3.807200847	0.000140549	0.001340982	Rrm1
ENSMUSG00C 17.18742545	1.911326996	0.502103497	3.806639478	0.000140868	0.001343205	Tnf
ENSMUSG00C 428.2073672	0.545289425	0.143334077	3.804325084	0.000142191	0.001352512	Vav3
ENSMUSG00C 1057.170991	0.458778604	0.120715287	3.800501285	0.000144404	0.001371879	Wdr6
ENSMUSG00C 364.1001885	0.603102179	0.158925501	3.794873542	0.000147719	0.001397405	Comm14
ENSMUSG00C 800.6800333	0.427619654	0.1127043	3.794173367	0.000148136	0.001400298	Brc1
ENSMUSG00C 23.11699758	1.638511442	0.431916925	3.793580078	0.000148491	0.001402152	Btdb11
ENSMUSG00C 27.58357181	1.440756784	0.379883397	3.792628988	0.000149061	0.001406682	Megf6
ENSMUSG00C 9.828329356	3.359397351	0.885827799	3.792381946	0.000149209	0.00140723	Gm8773
ENSMUSG00C 1448.793492	0.38364705	0.101174837	3.791921618	0.000149486	0.001408988	Fbln1
ENSMUSG00C 13.46977851	2.411093569	0.636069843	3.790611354	0.000150277	0.001414729	Aph1
ENSMUSG00C 946.2941183	0.359532688	0.094874192	3.789573137	0.000150906	0.001414729	Wee1

ENSMUSG00C 802.6610806	0.366290078	0.096719101	3.787153468	0.000152383	0.001429371	Sin3b
ENSMUSG00C 736.628141	0.416044142	0.109960799	3.783567823	0.000154596	0.001429371	Entpd7
ENSMUSG00C 607.8722547	0.408366782	0.108129352	3.776650596	0.000158951	0.001483331	Cnp
ENSMUSG00C 379.267522	0.443012923	0.117302467	3.776671828	0.000158938	0.001483331	Npc1
ENSMUSG00C 204.8781811	0.696444178	0.184411065	3.776585627	0.000158993	0.001483331	Recql4
ENSMUSG00C 265.5910297	0.68344976	0.181178132	3.772253051	0.00016178	0.001506625	Arhgef2
ENSMUSG00C 171.4870314	0.600260222	0.15918515	3.770830522	0.000162705	0.00151343	Ccdc14
ENSMUSG00C 52.46941635	1.105924095	0.293574972	3.76709257	0.00016516	0.001532546	Itga5
ENSMUSG00C 553.6192568	0.43727048	0.11608098	3.766943399	0.000165258	0.001532546	Rad54l
ENSMUSG00C 2407.879944	0.283776836	0.075374502	3.764891702	0.000166621	0.001540653	Khdrbs1
ENSMUSG00C 801.8749875	0.491558066	0.130594612	3.763999606	0.000167217	0.001545245	Tnk2
ENSMUSG00C 382.3924023	0.490386827	0.130414467	3.760218015	0.000169765	0.001561816	Plxnb1
ENSMUSG00C 79.96034852	0.9208211	0.244925008	3.75960425	0.000170182	0.001564291	Atxn7l2
ENSMUSG00C 1988.004109	0.318382261	0.084753622	3.756562281	0.000172263	0.00157876	Ubb
ENSMUSG00C 249.5811388	0.562361365	0.149917177	3.751146965	0.000176027	0.00160758	Phkg2
ENSMUSG00C 7.425314912	4.231717801	1.128317357	3.750467697	0.000176505	0.001610053	Htr1b
ENSMUSG00C 14.6738872	2.286037435	0.609733332	3.749241374	0.000177737	0.001616052	Sema3g
ENSMUSG00C 85.60594688	1.454239136	0.387916735	3.74884352	0.000177652	0.001617671	Irgm2
ENSMUSG00C 19.21844178	1.86010693	0.496359911	3.7474963	0.000178608	0.001624482	Pik3ip1
ENSMUSG00C 880.6320251	0.342379142	0.091428274	3.744784055	0.000180549	0.001639259	Litalf
ENSMUSG00C 146.2663051	0.726535072	0.194127703	3.742562546	0.000182153	0.00165286	Ube2e2
ENSMUSG00C 183.9425462	0.545130439	0.145664427	3.742371759	0.000182292	0.001653152	H2-Q7
ENSMUSG00C 181.4532767	0.602762945	0.161093348	3.741699776	0.00018278	0.001656615	Cc2d2a
ENSMUSG00C 484.6534532	0.478389765	0.127888379	3.740682077	0.000183522	0.001660526	Ccdc137
ENSMUSG00C 602.0880566	0.391725189	0.104720631	3.740668741	0.000183531	0.001660526	Pla2g16
ENSMUSG00C 1119.284616	0.327786425	0.087697859	3.737678756	0.000185727	0.001678442	Nup133
ENSMUSG00C 26.51699903	1.44208711	0.385943781	3.736521175	0.000186584	0.001683913	C1qtnf1
ENSMUSG00C 504.6636283	0.432318155	0.115731122	3.735539305	0.000187313	0.001688857	Elk4
ENSMUSG00C 7808.803999	0.269262035	0.072097597	3.734688055	0.000187948	0.001692619	Prap1
ENSMUSG00C 281.5575001	0.48738608	0.130710902	3.728733207	0.000192445	0.001731113	Sfxn2
ENSMUSG00C 1133.124032	0.357885075	0.095989814	3.72836514	0.000192726	0.001732642	Ddx56
ENSMUSG00C 35.95859537	1.196355736	0.321046079	3.726429988	0.000194211	0.001743979	Nod2
ENSMUSG00C 917.707927	0.350848608	0.094164793	3.725900065	0.00019462	0.001745634	Met
ENSMUSG00C 17.55633699	1.754902819	0.471581143	3.721316777	0.000198187	0.001774968	Syt14
ENSMUSG00C 1010.755995	0.432797792	0.116316885	3.720850956	0.000198553	0.001776818	Pfas
ENSMUSG00C 65.22842016	0.910016847	0.244908751	3.715738386	0.000202611	0.001808978	Esam
ENSMUSG00C 627.4166783	0.45933278	0.123707299	3.713061276	0.000204767	0.001827181	Vps37b
ENSMUSG00C 48.73858616	1.060330016	0.286338681	3.70306245	0.000213012	0.00189208	Gas1
ENSMUSG00C 80.52860145	0.808088737	0.218727498	3.694499979	0.00022032	0.001951423	Nod1
ENSMUSG00C 4557.978704	0.284088155	0.076935072	3.692570231	0.000221999	0.001964061	Sqle
ENSMUSG00C 81.3677073	0.842311958	0.228200326	3.691107601	0.00022328	0.001974034	Grik5
ENSMUSG00C 1306.364691	0.299474076	0.081180304	3.688999182	0.000225138	0.001987315	Rap1gap2
ENSMUSG00C 2624.983225	0.2689863	0.072956333	3.686949305	0.000226959	0.002001116	Zfp207
ENSMUSG00C 1712.476863	0.328720932	0.089170026	3.686450984	0.000227403	0.002002319	Acat2
ENSMUSG00C 22.80551923	1.560864476	0.423415699	3.686364201	0.000227481	0.002002319	Klb
ENSMUSG00C 130.4258309	0.807606653	0.219068786	3.686543705	0.00022732	0.002002319	Gm8494
ENSMUSG00C 56.33029658	0.951891871	0.258413486	3.683599821	0.000229963	0.002019603	Tuba1a
ENSMUSG00C 293.3150804	0.452155719	0.122872609	3.679873997	0.000233349	0.002044728	Rcan3
ENSMUSG00C 111.6500683	0.727522092	0.197843858	3.67725386	0.000235758	0.002058886	Mfsd4b4
ENSMUSG00C 112.7432395	0.759166099	0.206490944	3.676510384	0.000236446	0.002062792	Tanc2
ENSMUSG00C 1341.806836	0.464382975	0.126311707	3.676484043	0.000236471	0.002062792	Pprc1
ENSMUSG00C 1883.481588	0.282028681	0.076749798	3.674650448	0.000238175	0.002076153	Map4k4
ENSMUSG00C 1613.575157	0.414661981	0.112848781	3.674492353	0.000238323	0.002076153	Pom121
ENSMUSG00C 26.14110316	1.587797435	0.432225809	3.673536843	0.000239216	0.002082077	Otop3
ENSMUSG00C 50.49095328	0.966272903	0.263065628	3.673124878	0.000239602	0.002084272	Dsel
ENSMUSG00C 2903.147259	0.269965329	0.073531741	3.671412183	0.000241214	0.00209595	Lbr
ENSMUSG00C 940.6843956	0.328825764	0.089658335	3.66754263	0.000244893	0.002124359	Eny2
ENSMUSG00C 2531.243332	0.376773415	0.102788504	3.665520954	0.000246836	0.00213764	Numa1
ENSMUSG00C 329.2662464	0.429550338	0.117205726	3.66492622	0.00024741	0.002141423	Cep72
ENSMUSG00C 2805.454613	0.384748695	0.105032591	3.663136297	0.000249146	0.002152858	Jpt1
ENSMUSG00C 3805.013529	0.327638451	0.089456417	3.66254831	0.000249719	0.002155415	Ddx21
ENSMUSG00C 168.8097142	0.741305608	0.202603529	3.658897803	0.000253302	0.002180304	Cul7
ENSMUSG00C 511.4199367	0.419912389	0.11477328	3.658624983	0.000253572	0.00218142	Gstm5
ENSMUSG00C 932.920298	0.355261307	0.097157572	3.656547807	0.000255635	0.002195526	Mmp14
ENSMUSG00C 359.9752218	0.49065613	0.134212915	3.655804133	0.000256377	0.002200687	Brms1
ENSMUSG00C 681.4719768	0.348525234	0.095398043	3.65337928	0.000258811	0.00222036	Foxp1
ENSMUSG00C 7.052266266	4.075835111	1.116516526	3.650492416	0.000261738	0.002244231	Slo5a1
ENSMUSG00C 466.3567175	0.631946293	0.173192719	3.648804042	0.000263464	0.002255304	Oasl1
ENSMUSG00C 211.6982193	0.556801538	0.152812434	3.643692616	0.000268754	0.002295543	Gsm11246
ENSMUSG00C 67.02072931	0.832997398	0.228960044	3.638178017	0.000274574	0.002342677	5033406O09Rik
ENSMUSG00C 922.4039882	0.409915035	0.112695559	3.637366361	0.00027544	0.002346213	Pdlim1
ENSMUSG00C 994.1862218	0.337082545	0.092702333	3.636181904	0.000276709	0.002355503	Dis3
ENSMUSG00C 697.7604899	0.672772294	0.185027515	3.63606621	0.000276833	0.002355503	Lfrn4
ENSMUSG00C 43.4887567	1.082496936	0.298024104	3.632246254	0.000280965	0.002386745	Tenm3
ENSMUSG00C 7978.77745	0.355277688	0.097896999	3.629096829	0.000284415	0.002412102	Myh9
ENSMUSG00C 140.3427827	0.722153458	0.199098917	3.627108923	0.000286612	0.002428097	Prr3
ENSMUSG00C 639.3482251	0.39501394	0.108945014	3.625810159	0.000288057	0.002437682	Nde1
ENSMUSG00C 368.4161765	0.461726796	0.12735645	3.625468483	0.000288438	0.002438928	Fam83d
ENSMUSG00C 54.89348014	0.940093875	0.259309497	3.625373872	0.000288544	0.002438928	Wdr5b
ENSMUSG00C 840.4688945	0.430732738	0.114594005	3.625257167	0.000288674	0.002438928	Alg5
ENSMUSG00C 189.7649696	0.574955623	0.158904218	3.618252753	0.000296599	0.002496399	Pbx3
ENSMUSG00C 258.3356372	0.480645274	0.132878882	3.617168258	0.000297844	0.002504171	Txnrd3
ENSMUSG00C 564.5291976	0.430719245	0.119121441	3.61579948	0.000299422	0.002516083	Hnmpa1
ENSMUSG00C 87.29359382	0.839212345	0.232131281	3.615248851	0.000300059	0.002520077	Gm13384
ENSMUSG00C 928.1846767	0.488542754	0.13529469	3.610952904	0.000305074	0.002555377	Alyref
ENSMUSG00C 1089.559802	0.311291801	0.08620784	3.610945372	0.000305083	0.002555377	Sdad1
ENSMUSG00C 119.1960503	0.637802272	0.176664427	3.610247301	0.000305905	0.002560887	Zswim7
ENSMUSG00C 659.6854346	0.463777545	0.12849439	3.609321344	0.000306999	0.002568664	Herc3
ENSMUSG00C 259.5977975	0.540199223	0.149707545	3.608363385	0.000308135	0.002576781	Taf4b
ENSMUSG00C 358.341776	0.583540691	0.162080577	3.600312277	0.000317835	0.002653626	Snappc4
ENSMUSG00C 282.8055173	0.554221983	0.15395227	3.599959806	0.000318266	0.002655802	Trafd1
ENSMUSG00C 864.6501824	0.466484879	0.129726817	3.595901667	0.00032327	0.002655802	Tm7sf2



ENSMUSG000 1500.268742	0.486969073	0.135477258	3.594470997	0.000325051	0.002700287	Tbrg4
ENSMUSG000 12.43832255	2.753438701	0.766068387	3.594246606	0.000325332	0.002700287	Trim30a
ENSMUSG000 553.8044423	0.480120422	0.133691646	3.591252243	0.000329093	0.002725695	Tmem82
ENSMUSG000 12.93599546	2.080527976	0.579896425	3.587757893	0.000333534	0.002755148	Camkv
ENSMUSG000 1133.865978	0.302116799	0.084264651	3.585332584	0.000336649	0.002776462	Isg2012
ENSMUSG000 268.3698476	0.459508421	0.128218195	3.583800416	0.000338631	0.002788377	Ahrgef17
ENSMUSG000 164.8518241	0.681948561	0.190355273	3.58250419	0.000340316	0.002800773	Slc29a2
ENSMUSG000 88.09012107	2.705692744	0.75567645	3.580491022	0.000342949	0.002819462	Rtp4
ENSMUSG000 395.7540813	0.520061829	0.145274582	3.579854251	0.000343786	0.002821872	Atg2a
ENSMUSG000 76.59942239	1.074161308	0.300168061	3.578532987	0.000345528	0.002834679	Gm12940
ENSMUSG000 258.0239739	0.864503002	0.241679173	3.577068685	0.000347469	0.002847599	Itih5
ENSMUSG000 941.2956722	0.362029614	0.101252033	3.575529321	0.00034952	0.002859893	Tbcd
ENSMUSG000 616.6799131	0.59919162	0.167624396	3.574608682	0.000350752	0.002868467	Xdh
ENSMUSG000 460.20781	0.398628797	0.111624333	3.571163979	0.000355398	0.002899471	Ints9
ENSMUSG000 662.9807572	0.347564096	0.097331882	3.570917246	0.000355733	0.002900064	Tox3
ENSMUSG000 353.3056678	0.559449372	0.156676558	3.570728001	0.00035599	0.002900642	Gm13127
ENSMUSG000 428.827755	0.557367597	0.156148089	3.56948074	0.00035769	0.002912962	Tcf19
ENSMUSG000 1171.47213	0.366690903	0.102749978	3.568768687	0.000358663	0.002919362	Otub1
ENSMUSG000 610.330682	0.359517962	0.100793472	3.566877455	0.00036126	0.002937433	Hid1
ENSMUSG000 1399.697941	0.377834847	0.105979235	3.565178089	0.000363609	0.002952351	Wbp1l
ENSMUSG000 1513.193674	0.308166866	0.086469114	3.563895273	0.000365392	0.002961747	Far2
ENSMUSG000 1608.212666	0.452377666	0.126953196	3.563342095	0.000366163	0.002964911	Emp2
ENSMUSG000 499.3181158	0.467154881	0.131138836	3.562292409	0.000367631	0.002975247	Zfyve27
ENSMUSG000 16.34974106	1.745922141	0.490358076	3.560504513	0.000370143	0.002992469	Morn4
ENSMUSG000 76.41833934	0.884216456	0.24850117	3.558198368	0.000373407	0.003014165	Ubt2
ENSMUSG000 617.7529309	0.365662058	0.102805591	3.55683048	0.000375356	0.003028327	Zwilch
ENSMUSG000 395.9545907	0.579855154	0.163045018	3.556411362	0.000375955	0.003031589	Timeless
ENSMUSG000 260.4611254	0.461207895	0.129710072	3.555682993	0.000376998	0.003038428	Pask
ENSMUSG000 119.5670068	0.654204033	0.184024725	3.554978993	0.000378009	0.003043424	Sid1
ENSMUSG000 1298.270718	0.427411041	0.12027463	3.553625897	0.000379959	0.003057543	Papln
ENSMUSG000 18.9799464	1.828234615	0.514614541	3.552629142	0.000381402	0.003065982	Nrgn
ENSMUSG000 959.3700335	0.387008733	0.108958867	3.551879205	0.00038249	0.003073147	Chaf1a
ENSMUSG000 252.14984	0.469533766	0.132225021	3.551020533	0.00038374	0.0030816	Rmnd5b
ENSMUSG000 617.4598189	0.415294285	0.117066331	3.547512595	0.000388887	0.003119712	Mlist8
ENSMUSG000 621.7728407	0.367235846	0.10355245	3.546375256	0.00039057	0.003131596	Mrpl16
ENSMUSG000 86.99551107	0.950573129	0.268055265	3.546183385	0.000390854	0.003132264	Vwa5b2
ENSMUSG000 9.518158322	2.558342694	0.722350641	3.541690902	0.000397571	0.003182817	Foxd2os
ENSMUSG000 670.7063294	0.415902825	0.117584865	3.537043853	0.000404632	0.0032327	Sap30bp
ENSMUSG000 152.1192342	0.584702773	0.165355431	3.536036103	0.000406179	0.00324173	Ccnj
ENSMUSG000 227.9571801	0.56135064	0.158838444	3.534098078	0.000409169	0.00326058	Cep78
ENSMUSG000 368.3845387	0.493893147	0.139783075	3.533282888	0.000410433	0.003268728	Mybl2
ENSMUSG000 46.92778989	0.966362082	0.273700139	3.530732885	0.00041441	0.003290793	Accs
ENSMUSG000 82.28933358	1.06926036	0.302845383	3.5307113756	0.00041444	0.003290793	Shhg20
ENSMUSG000 376.8768413	0.428160592	0.121381621	3.527392268	0.000419675	0.003328962	Thsd4
ENSMUSG000 77.19414194	0.813748154	0.230721947	3.526964658	0.000420353	0.003332645	Gm26782
ENSMUSG000 29.14137093	1.284081558	0.36417457	3.526005561	0.000421878	0.003343035	Samd4
ENSMUSG000 666.59584	0.336272835	0.095441314	3.523346658	0.000426134	0.003373323	Rdh10
ENSMUSG000 307.6860057	0.505911574	0.143609161	3.522836355	0.000426955	0.003376391	Pdia5
ENSMUSG000 1125.692522	0.308458436	0.0875876	3.521713536	0.000428767	0.003389002	Senp1
ENSMUSG000 207.9028199	0.614707683	0.174649719	3.519660311	0.0004321	0.003406697	Cmtm7
ENSMUSG000 874.5459901	0.32045817	0.091188244	3.514248739	0.000441	0.00347159	Wdr75
ENSMUSG000 381.6670932	0.467472154	0.133028965	3.514062924	0.000441308	0.003472264	Pacs1
ENSMUSG000 33.6767063	1.44600045	0.411530628	3.513712837	0.00044189	0.003475087	Rims3
ENSMUSG000 46.82323136	0.967648842	0.275606573	3.510978827	0.00044646	0.003503946	Slc23a3
ENSMUSG000 97.52278464	0.675674129	0.192724491	3.505906925	0.000455054	0.003561442	Hsd11b2
ENSMUSG000 417.949274	0.432684651	0.123478454	3.504130777	0.0004581	0.003580864	Rad18
ENSMUSG000 31425.18208	0.592805061	0.169230884	3.502936613	0.000460159	0.003589747	mt-Cytlb
ENSMUSG000 510.6984868	0.448673956	0.12820366	3.499696936	0.000465787	0.003630018	Bora
ENSMUSG000 33.61129914	1.1646533	0.332785377	3.499712969	0.000465759	0.003630018	Tmem17
ENSMUSG000 24.8836055	1.341878261	0.383597857	3.498138057	0.000468519	0.003645828	Tbkbp1
ENSMUSG000 610.8312908	0.369401017	0.105621902	3.497390315	0.000469834	0.003654237	Nav2
ENSMUSG000 2426.979647	0.317605111	0.090832807	3.49659028	0.000471245	0.003663383	Glg1
ENSMUSG000 108.751503	0.730002453	0.208820526	3.495836679	0.000472578	0.00367008	Ern2
ENSMUSG000 227.3857959	0.573753155	0.164121308	3.495908992	0.00047245	0.00367008	Asb6
ENSMUSG000 2007.788806	0.268305895	0.07675356	3.495680119	0.000472855	0.003670403	Jpt2
ENSMUSG000 44.22740926	1.173671924	0.335826396	3.494876928	0.00047428	0.003679631	Crlf1
ENSMUSG000 400.650342	0.541826253	0.155405241	3.486537836	0.000489316	0.003783089	Endov
ENSMUSG000 1026.698758	0.31978967	0.091758412	3.485126482	0.000491904	0.003801213	Rnf220
ENSMUSG000 255.6263788	0.513948849	0.147688089	3.479961406	0.000501486	0.003869494	Itfg2
ENSMUSG000 1773.151022	0.382699739	0.110004155	3.478957134	0.000503369	0.003881807	Mcm2
ENSMUSG000 44.38798233	1.097914024	0.315605058	3.47875928	0.000503741	0.003881807	Nrg4
ENSMUSG000 841.863551	0.377676025	0.10859765	3.477755056	0.000505632	0.003893765	Cdca7l
ENSMUSG000 737.6424795	0.393844903	0.113279603	3.476750386	0.00050753	0.003906451	Figln1
ENSMUSG000 468.4014415	0.424571011	0.122244089	3.473141431	0.000514404	0.0039496	Rtel1
ENSMUSG000 154.6725145	0.785931751	0.226297134	3.473007979	0.00051466	0.003949616	1810032O08Rik
ENSMUSG000 408.1427943	0.457575649	0.131917578	3.468648043	0.000523084	0.003997358	Brd9
ENSMUSG000 1307.751393	0.275460786	0.079422766	3.468284982	0.000523792	0.003999979	Ndc1
ENSMUSG000 789.8573077	0.412036924	0.11881856	3.467782491	0.000524772	0.004005501	Zmynd19
ENSMUSG000 665.3288513	0.404060078	0.116566776	3.46634	0.000527596	0.004025082	Pink1
ENSMUSG000 478.6589237	0.501020413	0.144887351	3.457999664	0.000544202	0.004137583	Med9
ENSMUSG000 2216.342214	0.261702885	0.075781365	3.453393663	0.000553581	0.004206834	Gabpb2
ENSMUSG000 101.4066382	0.716244269	0.207549175	3.450961769	0.000558593	0.004242852	Atoh1
ENSMUSG000 23.31239705	1.419221468	0.411415844	3.449603338	0.000561411	0.004260101	Adcy3
ENSMUSG000 685.5234717	0.386429904	0.112021293	3.449611169	0.000561395	0.004260101	Noc4l
ENSMUSG000 169.609862	0.557158214	0.161732957	3.444926901	0.000571214	0.004321852	Fth-ps2
ENSMUSG000 20.29980454	1.523557224	0.442478289	3.443236115	0.000574797	0.004346852	Map1a
ENSMUSG000 653.8679523	0.330906857	0.096127389	3.442378486	0.000576623	0.004358541	Psmf1
ENSMUSG000 200.565441	0.549027952	0.159552532	3.441048197	0.000579465	0.004376626	Ctss
ENSMUSG000 1062.862067	0.336179992	0.097733612	3.439758193	0.000582234	0.004390299	Tnrc6a
ENSMUSG000 259.9371259	0.528122321	0.153838711	3.432961173	0.000597028	0.004487603	Tifa
ENSMUSG000 1871.778058	0.452864039	0.131948876	3.432117441	0.000598888	0.004496281	Sema4a
ENSMUSG000 74.55542641	0.898685994	0.261840245	3.432192002	0.000598724	0.004496281	1110028F11Rik

ENSMUSG00C 1295.090884	0.304739404	0.088805409	3.431541012	0.000600162	0.004503676	Tbrg1
ENSMUSG00C 98.6622321	0.76294389	0.222446474	3.429786396	0.000604057	0.004503676	Plat
ENSMUSG00C 21.89657884	1.424157298	0.415500799	3.42756813	0.000609013	0.004561303	R3hdml
ENSMUSG00C 690.7358178	0.455212268	0.132853652	3.426418928	0.000611596	0.004578445	Edc4
ENSMUSG00C 33.94530303	1.342464848	0.392056904	3.424158157	0.000616707	0.004612271	Lck
ENSMUSG00C 27.8560471	1.255596132	0.366853368	3.422610348	0.000620229	0.00463416	Mamld1
ENSMUSG00C 1224.619316	0.414618096	0.121162647	3.421996033	0.000621632	0.004638191	Pigs
ENSMUSG00C 1935.221935	0.260073075	0.076000695	3.421982838	0.000621662	0.004638191	Pitpnb
ENSMUSG00C 23.03010222	1.43040315	0.41799456	3.422061646	0.000621482	0.004638191	Cyp2d10
ENSMUSG00C 596.0219816	0.391399771	0.114413232	3.420930987	0.000624072	0.004651709	Yrdc
ENSMUSG00C 3881.62794	0.565952538	0.165519403	3.419251921	0.000627936	0.004678271	Sox4
ENSMUSG00C 195.5978359	0.497068472	0.145409587	3.418402338	0.000629899	0.004687165	Klhl20
ENSMUSG00C 334.5207091	0.468118554	0.136942655	3.418354588	0.00063001	0.004687165	Mfsd2a
ENSMUSG00C 10683.93743	0.486840327	0.142496671	3.416503168	0.000634309	0.004714477	Pcsk9
ENSMUSG00C 282.2695065	0.444315051	0.130123749	3.414557721	0.000638857	0.004743746	Fam204a
ENSMUSG00C 231.0924843	0.535055356	0.156858673	3.411066433	0.000647093	0.004795759	Synj2
ENSMUSG00C 313.7369435	0.445611473	0.130636873	3.411069656	0.000647086	0.004795759	Prmt6
ENSMUSG00C 2366.561576	0.265908721	0.078111524	3.404218826	0.000663536	0.004898964	9530068E07Rik
ENSMUSG00C 319.164909	0.434971332	0.127803986	3.403425399	0.000665466	0.004908559	Meaf6
ENSMUSG00C 113.5944346	0.757944813	0.222727078	3.403020507	0.000666453	0.004908863	Sgcb
ENSMUSG00C 14.4341742	1.814235986	0.533498425	3.400639814	0.000672283	0.004949468	Fam57b
ENSMUSG00C 131.228559	0.628760292	0.184938877	3.399827575	0.000674284	0.004959504	Gm20559
ENSMUSG00C 197.0656074	0.506924411	0.149117032	3.399507123	0.000675074	0.004962047	Tma16
ENSMUSG00C 473.0510786	0.445548068	0.131078012	3.399106096	0.000676065	0.004963228	Arrdc3
ENSMUSG00C 1133.456893	0.342193409	0.10068664	3.39859796	0.000677322	0.004967773	Sart1
ENSMUSG00C 9.24452082	2.531295677	0.745463484	3.395599825	0.000684784	0.005015415	Rnf144a
ENSMUSG00C 63.83606301	0.814004165	0.239741504	3.395341025	0.000685432	0.005015444	Khdrbs3
ENSMUSG00C 307.2873078	0.460179479	0.135589371	3.393920009	0.000688998	0.005039169	Ddx55
ENSMUSG00C 188.1387041	0.491741187	0.144902001	3.393612135	0.000689773	0.005042468	Ptger4
ENSMUSG00C 13.49837777	2.154618678	0.635463062	3.390627726	0.000697328	0.005085755	Dock3
ENSMUSG00C 724.4820708	0.476781937	0.140642624	3.390024484	0.000698864	0.005092189	Patz1
ENSMUSG00C 95.01487399	0.800760059	0.23631048	3.388593085	0.000702522	0.005114056	Wdr31
ENSMUSG00C 183.8483749	0.550538856	0.162515766	3.387602746	0.000705063	0.005125367	Map3k15
ENSMUSG00C 69.01022598	0.797530707	0.23544667	3.387309354	0.000705818	0.005128458	Cfap43
ENSMUSG00C 103.4537966	0.856519411	0.252901669	3.386768515	0.00070721	0.005136181	Dtx3
ENSMUSG00C 121.1324562	0.722356657	0.213376989	3.385354064	0.000710865	0.005157912	Rab11fip2
ENSMUSG00C 79.51025561	0.873794798	0.25817867	3.384457743	0.00071319	0.005172371	Rab26os
ENSMUSG00C 304.914843	0.439617184	0.129954959	3.382842683	0.000717397	0.005200461	Recql
ENSMUSG00C 459.709507	0.408849299	0.120903321	3.381621748	0.000720593	0.005221197	Gins2
ENSMUSG00C 19.07866255	1.468134862	0.434239763	3.380931426	0.000722406	0.005227035	Tlr2
ENSMUSG00C 67.11058557	0.929126502	0.274874291	3.380186986	0.000724365	0.005236347	Ddah2
ENSMUSG00C 154.6406843	0.661033212	0.1959727	3.373088245	0.000743301	0.005358307	Gm5580
ENSMUSG00C 1301.621374	0.269664259	0.079967294	3.372181861	0.000745752	0.005373486	Ugt1a1
ENSMUSG00C 80.5819466	0.864225619	0.256331097	3.371520779	0.000747544	0.005383907	Rpl39-ps
ENSMUSG00C 309.3825219	0.407868406	0.121031134	3.369946165	0.000751829	0.00540468	Sec16b
ENSMUSG00C 352.4077358	0.391811934	0.116270761	3.369823413	0.000752164	0.00540468	Sgsm1
ENSMUSG00C 446.8236891	0.382871378	0.11364289	3.369074645	0.00075421	0.005416884	Jade2
ENSMUSG00C 725.5721626	0.356681901	0.105874116	3.36892448	0.000754621	0.005417337	Heatr3
ENSMUSG00C 1587.486068	0.378261295	0.112284638	3.368771557	0.00075504	0.005417845	Nop56
ENSMUSG00C 13.84201989	1.993033136	0.591742802	3.368073309	0.000756955	0.005429084	Lzts1
ENSMUSG00C 352.2267722	0.405068804	0.120377144	3.364997618	0.000765443	0.005482778	Tsr2
ENSMUSG00C 184.7252083	0.634093203	0.188446134	3.364851207	0.000765849	0.005482778	Creb3l1
ENSMUSG00C 739.2716346	0.415851379	0.12361208	3.364164556	0.000767758	0.005493912	Mpdu1
ENSMUSG00C 241.3329032	0.472154111	0.140400231	3.362915475	0.00077124	0.005516295	Vwce
ENSMUSG00C 308.3281074	0.435696526	0.129819063	3.356182958	0.000790263	0.005631662	Smim6
ENSMUSG00C 805.6780989	0.377872126	0.112626745	3.355083417	0.000793411	0.005645704	Tsc2
ENSMUSG00C 304.5986539	0.535146609	0.159499414	3.355163487	0.000793181	0.005645704	Zfp101
ENSMUSG00C 16.32127039	2.626472404	0.782855915	3.354988259	0.000793684	0.005645704	Apol9a
ENSMUSG00C 639.0301264	0.430978238	0.128735255	3.347787194	0.000814595	0.005786526	Zfp777
ENSMUSG00C 1111.152021	0.275365719	0.082258973	3.347546275	0.000815304	0.005788917	Minpp1
ENSMUSG00C 262.2584397	0.511926314	0.152971783	3.346540806	0.000818266	0.005802015	Capn2
ENSMUSG00C 25.48111228	1.397564265	0.41778543	3.345172346	0.000822315	0.005825414	Efcab1
ENSMUSG00C 1160.588964	0.327852998	0.098035842	3.344215676	0.000825156	0.005840226	Wnk2
ENSMUSG00C 1326.733521	0.31976726	0.095647403	3.343188108	0.000828217	0.005859233	Arid5b
ENSMUSG00C 125.3830808	0.735024004	0.219929428	3.342090288	0.0008315	0.005879786	Hspb6
ENSMUSG00C 102.2197466	0.773305729	0.231393174	3.341955669	0.000831903	0.005879968	Flywch2
ENSMUSG00C 350.6653522	0.400391209	0.119832115	3.34126797	0.000833967	0.005890772	Sema3b
ENSMUSG00C 1296.36062	0.391787127	0.117291971	3.340272334	0.000836963	0.005905005	Tcof1
ENSMUSG00C 136.3293611	0.621815335	0.186236658	3.338845006	0.000841275	0.005927372	Gm14230
ENSMUSG00C 1059.237602	0.32367858	0.097000099	3.336889157	0.000847217	0.00596654	Ddx27
ENSMUSG00C 124.7076002	0.642568272	0.192599295	3.33629608	0.000849027	0.005976581	Ctbs
ENSMUSG00C 84.6250257	0.720592094	0.216026084	3.3356717	0.000850936	0.005984608	Gm1976
ENSMUSG00C 311.5712317	0.420072189	0.125947714	3.335290293	0.000852104	0.005987415	Ppm1f
ENSMUSG00C 774.3334551	0.331425976	0.099381888	3.334873015	0.000853384	0.005989388	Fzd7
ENSMUSG00C 306.2848704	0.411643717	0.123437971	3.33482246	0.000853539	0.005989388	Lyrm9
ENSMUSG00C 20.4157855	1.603492654	0.480976915	3.333824566	0.000856607	0.0060028	Prickle1
ENSMUSG00C 949.1356096	0.316847087	0.095036853	3.33393917	0.000856254	0.0060028	Utp4
ENSMUSG00C 23.77780159	1.397030209	0.419119767	3.333248198	0.000858383	0.006012545	Cyp2e1
ENSMUSG00C 923.1312026	0.304029175	0.091286751	3.330485206	0.000866948	0.006061627	Csrp1
ENSMUSG00C 124.3781986	0.597144316	0.179377294	3.328984966	0.000871631	0.006088904	Il1rn
ENSMUSG00C 1171.075666	0.293216118	0.08808307	3.328858984	0.000872025	0.006088927	Eif1ad
ENSMUSG00C 1589.017652	0.377840187	0.113548113	3.327577866	0.000876045	0.006114252	Ube2c
ENSMUSG00C 368.5209747	0.436016386	0.131132971	3.324994334	0.000884203	0.006160148	Amer1
ENSMUSG00C 355.4096735	0.439996497	0.132350399	3.32448184	0.00088583	0.006168721	Poc1a
ENSMUSG00C 2714.667486	0.240647431	0.072551526	3.316917571	0.000910165	0.006318401	Rnf4
ENSMUSG00C 171.8940545	0.556210299	0.167818041	3.314365343	0.000918514	0.006367846	Rbak
ENSMUSG00C 857.9939267	0.366755483	0.110673858	3.313840233	0.000920241	0.006376977	Gm7701
ENSMUSG00C 798.0912072	0.324575622	0.098011415	3.311610393	0.000927606	0.006413747	Adgrl2
ENSMUSG00C 22779.13513	0.416708954	0.125858319	3.310936913	0.000929842	0.006422773	Fcgbp
ENSMUSG00C 1613.938718	0.407788114	0.123211219	3.309667056	0.00093407	0.006445706	Cad
ENSMUSG00C 20.15007376	1.439922469	0.43509095	3.309474653	0.000934712	0.006445706	Ttc8
ENSMUSG00C 108.0767753	0.782972872	0.236652694	3.308531413	0.000937867	0.006445706	Gfra3

ENSMUSG00C 363.0330595	0.53903428	0.1629882	3.307198186	0.000942342	0.006489698	Cplx2
ENSMUSG00C 3168.907023	0.243234801	0.073551752	3.306988534	0.000943048	0.006489698	Nop58
ENSMUSG00C 778.0950884	0.314057928	0.095035539	3.30463667	0.000950996	0.00653773	Rad51
ENSMUSG00C 9.045220052	2.35626386	0.713070167	3.30439271	0.000951824	0.006540535	Ddr2
ENSMUSG00C 316.2869207	0.690242242	0.20896672	3.303120426	0.000956153	0.006561596	Mgam2-ps
ENSMUSG00C 39.99506215	1.046412115	0.316953122	3.301472814	0.000961787	0.00659154	C2cd4c
ENSMUSG00C 1956.776022	0.093768498	0.093768498	3.298563947	0.000971807	0.006654359	Ppif
ENSMUSG00C 9.694912279	2.216672911	0.6732474	3.292508684	0.000992978	0.006775489	Fbxo32
ENSMUSG00C 1832.626717	0.356051149	0.108221082	3.290035029	0.001001749	0.006820392	Smg5
ENSMUSG00C 259.3272603	0.460309398	0.139972704	3.288565437	0.001006994	0.006853103	Fut11
ENSMUSG00C 45.79573399	0.903433986	0.274897506	3.286439368	0.001014626	0.006896003	Tfr2
ENSMUSG00C 39570.24716	0.534537626	0.162704211	3.285333692	0.001018617	0.006920104	mt-Co1
ENSMUSG00C 77.92609351	0.770464643	0.23453849	3.285024317	0.001019736	0.006924686	Snph
ENSMUSG00C 1262.662042	0.274549527	0.08358038	3.28485615	0.001020345	0.0069258	Nup98
ENSMUSG00C 109.1299015	0.784125468	0.238792211	3.283714591	0.001024486	0.006947855	Dennd6b
ENSMUSG00C 498.740038	0.354300565	0.107971726	3.28141985	0.001032859	0.006980314	Zdhhc16
ENSMUSG00C 218.1806736	0.516904814	0.157523408	3.281447622	0.001032757	0.006980314	Plekhhg5
ENSMUSG00C 10.26040458	2.294914227	0.699506217	3.280763161	0.001035266	0.006991491	Ahrr
ENSMUSG00C 514.0819328	0.435082601	0.132627047	3.280496785	0.001036244	0.006994089	Bcap29
ENSMUSG00C 86.98457693	0.696489442	0.212334097	3.280158258	0.001037489	0.006996421	Ptprr
ENSMUSG00C 16.72785525	1.585412538	0.483631542	3.278141313	0.001044931	0.007040509	Tmem140
ENSMUSG00C 167.3117655	0.625462949	0.191134485	3.272371012	0.001066495	0.007164106	Ankle1
ENSMUSG00C 634.7362365	0.382624404	0.116944097	3.271857352	0.001068435	0.007174039	Cdk5rap2
ENSMUSG00C 349.1223544	0.413135178	0.126402779	3.268402645	0.001081564	0.007252812	Trub2
ENSMUSG00C 1834.922865	0.284167983	0.086972559	3.267329228	0.001085673	0.007270977	Psmc3
ENSMUSG00C 616.5632598	0.348778866	0.10681333	3.265312157	0.001093435	0.007313521	Exoc6
ENSMUSG00C 1138.142234	0.287402902	0.088031724	3.264765108	0.001095549	0.007323224	Crip1
ENSMUSG00C 34.62170588	1.047226278	0.320773243	3.264693365	0.001095826	0.007323224	Mvb12b
ENSMUSG00C 281.7106322	0.420841969	0.128935663	3.263968709	0.001098633	0.007338831	BC055324
ENSMUSG00C 27.68492247	1.176332819	0.360728253	3.260994414	0.001110222	0.007406714	Eml5
ENSMUSG00C 866.4014252	0.294991904	0.090516851	3.258972214	0.001118166	0.007437405	Tmem57
ENSMUSG00C 2572.871966	0.359722273	0.110389345	3.258668423	0.001119364	0.007442194	Srsf5
ENSMUSG00C 70.85111517	1.054667151	0.323786232	3.257294614	0.001124796	0.007465693	Tgfb1
ENSMUSG00C 1872.241978	0.353925978	0.108664757	3.25704477	0.001125787	0.00746895	Mark2
ENSMUSG00C 496.7960541	0.392023868	0.120509194	3.253061906	0.001141686	0.007567985	Ctdp1
ENSMUSG00C 157.9480038	0.548094467	0.168537862	3.252055417	0.001145737	0.007591603	Gm5703
ENSMUSG00C 442.9781446	0.437816188	0.134632584	3.251933332	0.001146229	0.007591634	E2f1
ENSMUSG00C 36.47148988	1.103134868	0.339268823	3.251506748	0.001147951	0.007599803	Il20rb
ENSMUSG00C 3991.879506	0.214101039	0.065878068	3.249959296	0.001154215	0.007631544	Lrig1
ENSMUSG00C 2475.970338	0.306159525	0.094233932	3.248930821	0.001158396	0.007655939	Pcdh1
ENSMUSG00C 1170.233942	0.402068861	0.123795822	3.247838709	0.001162852	0.007678865	Nup85
ENSMUSG00C 264.8186376	0.408543215	0.12583954	3.246540902	0.001168167	0.007710692	Snn
ENSMUSG00C 1004.717173	0.296790476	0.091421163	3.246408881	0.001168709	0.0077711	Nelfe
ENSMUSG00C 1626.453933	0.475330535	0.146537874	3.243738441	0.00117972	0.007774978	Zmiz2
ENSMUSG00C 66.01883086	0.869547108	0.268073078	3.243694272	0.001179903	0.007774978	Tet1
ENSMUSG00C 105.4229373	0.709117086	0.21871262	3.24223214	0.001185974	0.007808371	Gm6104
ENSMUSG00C 2867.37737	0.382378412	0.117951774	3.241819946	0.00118769	0.007816368	Mlxip1
ENSMUSG00C 136.1637373	0.575281221	0.177510304	3.24083283	0.001191811	0.007838078	Dcp1b
ENSMUSG00C 4050.210174	0.223220636	0.068901388	3.239711744	0.001196506	0.007864413	Larp1
ENSMUSG00C 558.1507264	0.39936713	0.123313152	3.238641805	0.001201003	0.007883987	Znrf3
ENSMUSG00C 100.558743	0.632153212	0.195224673	3.238080522	0.001203368	0.007883996	Stat5a
ENSMUSG00C 7.522966872	3.241313663	1.000910878	3.238363909	0.001202174	0.007883996	Ttc28
ENSMUSG00C 2187.426762	0.268562906	0.08293837	3.238102035	0.001203278	0.007883996	2900026A02Rik
ENSMUSG00C 9.508301542	2.536307082	0.784723658	3.232102226	0.001228831	0.008022694	Nlrc5
ENSMUSG00C 45.79272988	1.143058686	0.353684682	3.231858047	0.001229881	0.008026187	Pcdhac2
ENSMUSG00C 110.964519	0.598732732	0.185347008	3.230333937	0.001236457	0.008062342	Mtfr2
ENSMUSG00C 442.6572471	0.429500237	0.132976918	3.229885641	0.001238397	0.008071614	Gm5898
ENSMUSG00C 663.0118303	0.306641158	0.095001881	3.227737764	0.001247733	0.008129059	Vrk1
ENSMUSG00C 141.8508129	0.555057052	0.172122696	3.22477549	0.001260715	0.00820334	Cfap36
ENSMUSG00C 540.1335837	0.345797343	0.107241855	3.224462517	0.001262094	0.008208881	Emc8
ENSMUSG00C 13.94444706	1.792752907	0.556031295	3.224194257	0.001263277	0.008213145	Cln3n3
ENSMUSG00C 126.642249	0.602497669	0.186944352	3.222871741	0.001269124	0.008240554	Soga1
ENSMUSG00C 490.7893305	0.522109424	0.162031893	3.222263322	0.001271822	0.008248872	Gm9774
ENSMUSG00C 1597.175105	0.260268284	0.080889216	3.217589407	0.001292727	0.008362012	Ddx24
ENSMUSG00C 1275.750662	0.264863387	0.082334943	3.216901321	0.001295832	0.008372363	Ppat
ENSMUSG00C 829.9521192	0.412983959	0.128479745	3.214389636	0.001307222	0.008434683	Fam53c
ENSMUSG00C 274.2523597	0.452659053	0.140846055	3.213856807	0.00130965	0.008444122	Txnrc16
ENSMUSG00C 36.10857077	1.008557081	0.314150444	3.210427037	0.001325379	0.008534937	1700086O06Rik
ENSMUSG00C 1128.163516	0.564196863	0.175750365	3.2102173	0.001326347	0.008537637	Ctd1
ENSMUSG00C 42.64691945	1.220688928	0.380334282	3.209515908	0.001329587	0.008554545	Sh2d5
ENSMUSG00C 8.110773786	2.530106659	0.789326277	3.205400266	0.001348748	0.008663924	H2-DMb1
ENSMUSG00C 436.2841115	0.583606077	0.182079718	3.20522288	0.001349579	0.008665691	Psmb3
ENSMUSG00C 344.8872967	0.465481145	0.145367336	3.20210273	0.001364283	0.008752887	Mad111
ENSMUSG00C 1768.002975	0.271329115	0.084752553	3.201427048	0.001367487	0.008769827	Rpa1
ENSMUSG00C 68.28217906	0.94187323	0.294241998	3.201015613	0.001369441	0.008771521	Mxd3
ENSMUSG00C 100.5855446	0.633216993	0.197907342	3.199562919	0.001376361	0.008804981	Nemp2
ENSMUSG00C 2286.809326	0.389020535	0.121704721	3.196429297	0.001391399	0.008880339	Ubf1
ENSMUSG00C 29.69192068	1.137544937	0.35588368	3.196395345	0.001391563	0.008880339	Rapgef4
ENSMUSG00C 136.6725349	0.571484504	0.178829348	3.195697521	0.001394933	0.00889151	Mreg
ENSMUSG00C 41.86197936	0.984329435	0.308030746	3.195555795	0.001395618	0.00889151	Naip3
ENSMUSG00C 176.5667101	0.481932222	0.150841229	3.194963499	0.001398485	0.008902622	Hemgn
ENSMUSG00C 2308.941551	0.299361958	0.093704513	3.194744281	0.001399548	0.008905746	Kars
ENSMUSG00C 13.49691698	1.758923865	0.550774027	3.193549037	0.001405355	0.008931746	Nckap5l
ENSMUSG00C 7.0207602	2.830444685	0.886551072	3.192647072	0.001409751	0.008952381	Gm17250
ENSMUSG00C 687.0191982	0.407535044	0.127658154	3.192393365	0.00141099	0.008956596	Gnl1
ENSMUSG00C 37.51399123	1.261995772	0.395331954	3.192243275	0.001411724	0.0089576	Adnp
ENSMUSG00C 71.10455454	0.750414799	0.235180938	3.190797718	0.001418806	0.00899887	Ccdc116
ENSMUSG00C 199.6976775	0.634273655	0.198983507	3.187568988	0.001434742	0.009085145	9330162012Rik
ENSMUSG00C 450.7581969	0.504073965	0.15820727	3.186161826	0.001441739	0.009122033	Pkmyt1
ENSMUSG00C 370.0283645	0.356578235	0.11194609	3.185267447	0.001446203	0.00914418	Galnt12
ENSMUSG00C 694.9496534	0.392086115	0.123135024	3.184196516	0.001451564	0.009169293	Fbxo21
ENSMUSG00C 143.1342861	0.689419327	0.216603002	3.182870602	0.001458228	0.00917649	Fxn

ENSMUSG00C 1177.515808	0.299904717	0.094254581	3.181858246	0.001463334	0.009236148	Kansl1
ENSMUSG00C 18.86747696	1.420855376	0.44657964	3.181639395	0.00146444	0.009236148	Ldlrad4
ENSMUSG00C 541.4715047	0.725219692	0.227951568	3.181463931	0.001465328	0.009241079	Fam222a
ENSMUSG00C 10.52992407	2.045125737	0.642848063	3.181351634	0.001465896	0.009241079	Dmrt2
ENSMUSG00C 983.3705232	0.360578647	0.113412178	3.179364457	0.001475984	0.009293386	Tatdn2
ENSMUSG00C 3863.921812	0.331390637	0.104267032	3.178287795	0.001481476	0.009316666	Kcnq1
ENSMUSG00C 779.0287655	0.469870468	0.147847945	3.178065608	0.001482612	0.009320045	Acs14
ENSMUSG00C 570.5210516	0.364864448	0.114992744	3.172934532	0.001509065	0.009467228	Synrg
ENSMUSG00C 31.54165999	1.133523493	0.357297013	3.17249642	0.001511344	0.009477705	Abi2
ENSMUSG00C 360.7643115	0.474257261	0.149511503	3.172045293	0.001513694	0.009477955	Celsr2
ENSMUSG00C 206.8499288	0.437742717	0.137994154	3.172183057	0.001512976	0.009477955	Gm13181
ENSMUSG00C 574.5723593	0.492308853	0.155287216	3.170311529	0.001522756	0.009522422	Pnlipr2
ENSMUSG00C 226.3841927	0.464989699	0.146667935	3.170356896	0.001522518	0.009522422	Alkbh3
ENSMUSG00C 2479.977833	0.316672058	0.09993007	3.168936611	0.001529978	0.009563742	Sema4g
ENSMUSG00C 132.9941611	0.687074589	0.216850324	3.168427774	0.001532658	0.009572813	Nudt22
ENSMUSG00C 235.8586285	0.629470069	0.626684096	3.167576906	0.00153715	0.009593174	Oasl2
ENSMUSG00C 555.9440519	0.67775673	0.213986873	3.167281814	0.001538711	0.009599068	Irgm1
ENSMUSG00C 1943.91272	0.448052124	0.14162179	3.163723061	0.001557649	0.009705546	Upf1
ENSMUSG00C 169.7607585	0.329700224	0.230962676	3.159385913	0.00158102	0.009835422	Adrm1
ENSMUSG00C 121.9273619	0.549620507	0.174101807	3.156891458	0.001594607	0.009909586	Kctd18
ENSMUSG00C 950.9610932	0.439142254	0.139117838	3.156620746	0.001596088	0.009913317	Dtymk
ENSMUSG00C 631.0019043	0.320664311	0.101682334	3.153589211	0.001612759	0.010012869	Inip
ENSMUSG00C 83.96464614	0.726895371	0.230508003	3.153449607	0.001613531	0.010013666	Habp2
ENSMUSG00C 94.15082622	0.657831115	0.208643145	3.152900678	0.001616568	0.010028518	Gm5307
ENSMUSG00C 100.9687588	0.629470069	0.199769886	3.151000622	0.001627121	0.010081937	Kcnk6
ENSMUSG00C 585.0698286	0.529315318	0.167999292	3.150699689	0.001628799	0.010088315	Gna12
ENSMUSG00C 197.2749082	0.566695704	0.180037484	3.147653993	0.001645864	0.010161676	Prodh
ENSMUSG00C 320.4659969	0.477982817	0.151917972	3.146321744	0.00165338	0.010204036	Fpgs
ENSMUSG00C 235.2598947	0.435265541	0.138397838	3.145031357	0.00166069	0.010245091	Cep152
ENSMUSG00C 17.62097889	1.536221026	0.488650329	3.143804344	0.001667669	0.010279998	Mrlp23
ENSMUSG00C 804.4130577	0.385987625	0.122787177	3.143549953	0.001669119	0.010284866	Dhx38
ENSMUSG00C 361.856097	0.375577901	0.119498349	3.14295472	0.001672517	0.010293583	Acer2
ENSMUSG00C 2227.44358	0.386679892	0.123052716	3.142392169	0.001675734	0.010309308	Cpd
ENSMUSG00C 351.9950241	0.372238423	0.118475087	3.141913058	0.001678479	0.010322114	Arhgap39
ENSMUSG00C 373.3020622	0.404559646	0.128786271	3.141325879	0.001681848	0.010338749	Hus1
ENSMUSG00C 35161.96748	0.501280018	0.159669172	3.139491552	0.001692413	0.010392627	mt-Nd1
ENSMUSG00C 216.3225	0.588867408	0.187569849	3.139456635	0.001692615	0.010392627	Gm5184
ENSMUSG00C 599.3357497	0.31573159	0.100578861	3.139144612	0.001694418	0.010399599	Sipa112
ENSMUSG00C 2831.207357	0.34328244	0.109363881	3.138901418	0.001695825	0.010404133	Mgea5
ENSMUSG00C 2329.99766	0.323124453	0.103183835	3.131541421	0.001738913	0.010630784	Qsox1
ENSMUSG00C 4942.958514	0.221432872	0.070756948	3.129485895	0.001751125	0.010692849	Tmprss2
ENSMUSG00C 1450.308422	0.340642574	0.108869035	3.128920686	0.001754497	0.010705042	Prpsap1
ENSMUSG00C 138.6267311	0.612370713	0.195806547	3.127427151	0.001763435	0.010751155	Mcoln2
ENSMUSG00C 68.00270522	0.812791194	0.259951554	3.126702572	0.001767787	0.01076504	Mapt
ENSMUSG00C 1528.564045	0.321111026	0.102717805	3.126147673	0.001771126	0.010776945	Man2b1
ENSMUSG00C 129.9410054	0.646619695	0.206838008	3.126213115	0.001770732	0.010776945	Anxa1
ENSMUSG00C 779.5150316	0.343126562	0.109838095	3.123930382	0.001784527	0.010845771	Mre11a
ENSMUSG00C 73.17656518	0.958591737	0.306903423	3.123431236	0.001787556	0.010859945	4933439C10Rik
ENSMUSG00C 239.8506276	0.429172649	0.137447007	3.122459035	0.001793471	0.010891627	Tinagl1
ENSMUSG00C 2661.538292	0.272524686	0.087324501	3.120827299	0.001803438	0.010947886	Mta2
ENSMUSG00C 731.6699203	0.443945153	0.142279944	3.120223004	0.001807142	0.010961825	Rai1
ENSMUSG00C 32.10081487	1.065815784	0.341574685	3.120300864	0.001806664	0.010961825	Gm5781
ENSMUSG00C 409.5484207	0.6472641	0.207452173	3.120064204	0.001808116	0.010963465	Hgh1
ENSMUSG00C 596.3216866	0.348778497	0.111812035	3.119328756	0.001812636	0.010973777	Mep1a
ENSMUSG00C 2052.874074	0.266740768	0.085555664	3.117745295	0.001822402	0.011023998	Wdr43
ENSMUSG00C 671.0049498	0.298364582	0.095710738	3.11735746	0.001824802	0.011030274	Mecp2
ENSMUSG00C 191.5134457	0.457115166	0.146815193	3.113541298	0.001848566	0.01115381	Prss16
ENSMUSG00C 1126.115327	0.279929793	0.089907418	3.113533886	0.001848613	0.01115381	Fubp3
ENSMUSG00C 195.98587	0.558073295	0.179318019	3.112198645	0.001856995	0.011198787	Troap
ENSMUSG00C 2523.590667	0.246720878	0.079284618	3.11183791	0.001859266	0.011203802	Snrnp200
ENSMUSG00C 25.2728795	1.232210595	0.396045999	3.111281511	0.001862773	0.011220593	Lyg6e
ENSMUSG00C 141.6362632	0.689507537	0.22168458	3.110308966	0.001868917	0.011253253	Cftr2
ENSMUSG00C 28.9269801	1.177063735	0.378653927	3.108547542	0.001880094	0.011307433	2900005J15Rik
ENSMUSG00C 170.6303467	0.472298832	0.151948274	3.108286916	0.001881753	0.01131304	Tk2
ENSMUSG00C 152.1509077	0.508515551	0.163621497	3.107877393	0.001884362	0.011319986	Map3k14
ENSMUSG00C 324.2581963	0.703336965	0.226340927	3.107422842	0.001887262	0.011333036	C1ps
ENSMUSG00C 171.759417	0.472240907	0.152021908	3.106400335	0.001893801	0.01135258	Gins1
ENSMUSG00C 224.5681613	0.477610929	0.153753394	3.106343982	0.001894162	0.01135258	Fmn12
ENSMUSG00C 2001.522282	0.224477378	0.072270342	3.106078792	0.001895862	0.01135716	Shmt1
ENSMUSG00C 1260.670342	0.279325371	0.089948662	3.10538662	0.001900305	0.011376256	Erg28
ENSMUSG00C 674.197973	0.318946448	0.102719639	3.105019159	0.001902667	0.011376921	Pcnt
ENSMUSG00C 592.1152503	0.340683489	0.10971498	3.105168406	0.001901707	0.011376921	Cramp11
ENSMUSG00C 65.41993332	0.879438943	0.28329833	3.104285661	0.001907391	0.011396769	Nlrc3
ENSMUSG00C 463.7111131	0.574299417	0.185070617	3.103136658	0.001914812	0.011432338	Gm4739
ENSMUSG00C 4204.106138	0.22766849	0.073428111	3.100563088	0.001931531	0.011514496	Itga6
ENSMUSG00C 330.6047368	0.378686069	0.122262964	3.097308101	0.001952868	0.011637067	Sash1
ENSMUSG00C 451.6092649	0.342233122	0.110497619	3.097199071	0.001953586	0.011637067	Slc25a32
ENSMUSG00C 842.4482179	0.32123362	0.103767852	3.095695002	0.001963522	0.011678382	Casp2
ENSMUSG00C 953.8525794	0.288957811	0.093402518	3.093683295	0.001976884	0.011748878	Atnrl1
ENSMUSG00C 653.7950493	0.311758387	0.100815615	3.092362093	0.001985705	0.011783311	Smardc1
ENSMUSG00C 425.7351026	0.768663798	0.248725138	3.090414598	0.001998773	0.011833799	Rpl10a
ENSMUSG00C 22.70189358	1.27440527	0.412545373	3.089127532	0.002007452	0.01188067	Ttyh1
ENSMUSG00C 1271.806964	0.380007445	0.123063283	3.08790271	0.002015745	0.011925212	Ncapg2
ENSMUSG00C 8.326649967	2.480268409	0.80333348	3.087470484	0.002018678	0.011928971	Uox
ENSMUSG00C 1192.198196	0.403608705	0.130753311	3.08679529	0.002023269	0.011951562	Sox9
ENSMUSG00C 949.1401248	0.281622315	0.091320543	3.083887853	0.002043146	0.012059828	Cdk12
ENSMUSG00C 361.8789522	0.366128997	0.11872791	3.083765204	0.002043988	0.012060229	Zfyve26
ENSMUSG00C 15.14832798	1.604793689	0.520430139	3.083590994	0.002045186	0.012062721	Mit3
ENSMUSG00C 280.3942195	0.534825766	0.173560992	3.081485988	0.002059702	0.01212996	Cdc26
ENSMUSG00C 75.36965746	0.663267159	0.215284841	3.080881853	0.002063885	0.012150003	Olfm1
ENSMUSG00C 408.4806915	0.384197515	0.124792309	3.078695458	0.002079091	0.012233027	Msto1
ENSMUSG00C 23.0794318	1.352837336	0.439644299	3.077117885	0.002090126	0.012233027	Rtkn2



ENSMUSG00C 19.44396529	1.342610013	0.436793262	3.073788288	0.002113594	0.012409791	Gm4890
ENSMUSG00C 9.299884336	2.051441258	0.667586284	3.072923016	0.002119732	0.012409791	Gm14167
ENSMUSG00C 9.52007315	2.114091271	0.689087037	3.067959718	0.002155257	0.012635355	Katnal2
ENSMUSG00C 429.8333623	0.367773232	0.11999115	3.065002966	0.002176678	0.012736963	2810459M11Rik
ENSMUSG00C 836.9321007	0.368994753	0.120405624	3.064597326	0.002179632	0.012749458	Tfdp2
ENSMUSG00C 28.14586123	1.074784277	0.350771404	3.064059002	0.002183558	0.012762833	Hhex
ENSMUSG00C 383.8317805	0.395453734	0.129098468	3.063194639	0.002189876	0.012790156	Rap1gap
ENSMUSG00C 566.9321082	0.428467225	0.139955921	3.06144407	0.002202721	0.012860358	Nr2c2ap
ENSMUSG00C 416.2373286	0.545560006	0.178339898	3.059102384	0.002220013	0.012954202	Med16
ENSMUSG00C 1322.336866	0.347917542	0.113766639	3.058168404	0.002226944	0.012986349	Nop2
ENSMUSG00C 1090.858895	0.300952848	0.098462124	3.056534202	0.002239119	0.013043519	Fnbp4
ENSMUSG00C 188.8169785	0.525987972	0.172199846	3.054520569	0.002254206	0.013111178	Eme2
ENSMUSG00C 118.6015908	0.706029021	0.231187401	3.053925159	0.002258684	0.013132924	Sycn
ENSMUSG00C 1231.986976	0.265988166	0.087190218	3.050665213	0.00228335	0.013231874	Hnmprr
ENSMUSG00C 130.5167443	0.752921502	0.246856327	3.050039311	0.002288114	0.013249619	Cenpm
ENSMUSG00C 1787.793504	0.336356043	0.110284479	3.049894664	0.002289216	0.013251074	Gcn11i
ENSMUSG00C 256.7043078	0.41032565	0.134561093	3.049363234	0.00229327	0.013259752	Map4k5
ENSMUSG00C 136.1843693	0.636047432	0.208618129	3.048859817	0.002297116	0.01327706	Zdhhc1
ENSMUSG00C 81.12973841	0.663107304	0.217635092	3.046876765	0.002312325	0.013350097	Tmem25
ENSMUSG00C 649.0433532	0.294508273	0.096728689	3.044683808	0.002329251	0.013427901	Gm6501
ENSMUSG00C 40.8164065	0.872386066	0.286674558	3.043123436	0.002341363	0.013472786	Gm42595
ENSMUSG00C 253.1452376	0.460897377	0.151553015	3.041162698	0.002356664	0.013550821	Sgsm3
ENSMUSG00C 16.83893737	1.634582297	0.53750616	3.041048494	0.002357559	0.013550958	H1fx
ENSMUSG00C 776.261184	0.39242043	0.129129032	3.038979106	0.002373813	0.013629294	Reep4
ENSMUSG00C 413.7315972	0.361174598	0.118858247	3.038700357	0.002376011	0.013631338	Mb21d1
ENSMUSG00C 2847.47918	0.274868172	0.090579497	3.034551741	0.002408934	0.013780131	Ephb2
ENSMUSG00C 1918.422266	0.331288466	0.109200793	3.033755141	0.002415304	0.013811493	Lrp5
ENSMUSG00C 5635.394482	0.338961973	0.111743915	3.033381948	0.002418293	0.013818437	Cfl1
ENSMUSG00C 307.307987	0.443555914	0.146335632	3.031086191	0.002436757	0.013908629	Wdr90
ENSMUSG00C 2775.506613	0.261843563	0.086436172	3.029328531	0.00245098	0.013974445	Prrc2b
ENSMUSG00C 60.25733221	0.771874827	0.255322879	3.02313224	0.002501729	0.014226299	Rcn1
ENSMUSG00C 312.5801612	0.438134217	0.144931491	3.023043608	0.002502462	0.014226299	Panx1
ENSMUSG00C 227.4634517	0.427573674	0.141485799	3.022025379	0.002510895	0.014263825	Chsy1
ENSMUSG00C 28.49889723	1.192967066	0.394842613	3.021373651	0.002516306	0.014289353	Pak3
ENSMUSG00C 653.3749704	0.427701112	0.141724997	3.01782411	0.002545966	0.014426216	Ccdc86
ENSMUSG00C 1696.531877	0.365829669	0.121278707	3.016437746	0.002557637	0.014471283	Acs1
ENSMUSG00C 1176.313829	0.265105547	0.087902529	3.015903527	0.002562148	0.014486275	Bap1
ENSMUSG00C 327.0921701	0.384323168	0.127480687	3.014756023	0.00257186	0.014530638	Polr3h
ENSMUSG00C 289.5290966	0.423580836	0.140603944	3.012581475	0.002590359	0.014624539	Ccne1
ENSMUSG00C 6648.320794	0.304165244	0.100970817	3.012407489	0.002591844	0.014627621	Eif5a
ENSMUSG00C 248.3053666	0.502475061	0.166851379	3.011512785	0.002599495	0.014665482	0610037L13Rik
ENSMUSG00C 1281.978348	0.264526612	0.087917565	3.008802758	0.002622793	0.014775512	Thumpd1
ENSMUSG00C 66.31894912	0.815508143	0.271096794	3.008180696	0.002628168	0.014800437	Slc43a1
ENSMUSG00C 585.8028476	0.317288527	0.105490381	3.007748406	0.002631909	0.014811622	Med12
ENSMUSG00C 601.9556083	0.424805117	0.141323797	3.005899406	0.002647966	0.014885009	Nbeal2
ENSMUSG00C 1570.379408	0.260889648	0.08685124	3.003867841	0.002665711	0.014968548	Eif4a1
ENSMUSG00C 338.9307323	0.357379537	0.119005105	3.003060563	0.002672792	0.015002902	Lanc12
ENSMUSG00C 1160.440289	0.278550115	0.092784947	3.002104599	0.0026812	0.015044674	Zfp646
ENSMUSG00C 221.0262163	0.509595843	0.169788583	3.001355179	0.002687809	0.015070892	Ighmbp2
ENSMUSG00C 164.7455714	0.549938918	0.183228709	3.001379648	0.002687593	0.015070892	Snu13
ENSMUSG00C 683.4142158	0.281097336	0.093701478	2.999924256	0.002700468	0.015125532	Ddx20
ENSMUSG00C 955.7976882	0.391232456	0.130489083	2.998200659	0.002715788	0.015200408	Ldb1
ENSMUSG00C 185.7311015	0.680533554	0.227016578	2.997726245	0.002720019	0.015218618	Snrnp25
ENSMUSG00C 11.64362741	1.695720969	0.565739154	2.997354802	0.002723336	0.015231702	Zfp248
ENSMUSG00C 23.82486887	1.373648034	0.458385379	2.996709965	0.002729102	0.015252998	Doc2b
ENSMUSG00C 907.2292791	0.298971398	0.099764178	2.996781044	0.002728466	0.015252998	Taf5l
ENSMUSG00C 740.8893075	0.309717322	0.103394727	2.99548468	0.002740091	0.015308917	Tmem205
ENSMUSG00C 517.0849533	0.321558423	0.107410149	2.993743382	0.002755776	0.015374486	Psd4
ENSMUSG00C 19.0781735	1.413045238	0.472571957	2.990116565	0.00278871	0.015541519	Wnt5b
ENSMUSG00C 711.1549512	0.284095345	0.095042236	2.989148377	0.002797562	0.015579701	Aatf
ENSMUSG00C 1198.110446	0.310005104	0.103728348	2.98862472	0.002802361	0.015600845	Eif4a3
ENSMUSG00C 1439.052842	0.237046727	0.079366113	2.986749856	0.002819603	0.015674417	Tfdp1
ENSMUSG00C 710.9026354	0.332633642	0.111397617	2.986003221	0.002826497	0.015701527	Cep250
ENSMUSG00C 16.92000992	1.545383565	0.517606451	2.985634283	0.002829909	0.015703673	Wfdc15b
ENSMUSG00C 896.8556036	0.311785683	0.104546106	2.982279255	0.002861109	0.015837301	Mbd1
ENSMUSG00C 795.5255217	0.344045905	0.115426981	2.980636787	0.002876497	0.015912957	Tuba1b
ENSMUSG00C 135.4535597	0.548648436	0.184202663	2.978504366	0.002896589	0.01599957	Gm8261
ENSMUSG00C 95.88590509	0.577988879	0.194144805	2.977101956	0.002909872	0.016061546	Al427809
ENSMUSG00C 524.9005974	0.42392174	0.142436525	2.976215118	0.002918301	0.01610236	Mbnl3
ENSMUSG00C 255.8090488	0.469444317	0.157761383	2.975660513	0.002923583	0.016125792	Polm
ENSMUSG00C 221.8679759	0.461853739	0.155265713	2.974602239	0.002933687	0.016175792	Reps2
ENSMUSG00C 12.82599919	1.681222009	0.565299396	2.974038219	0.002939085	0.016199818	Atp5g2
ENSMUSG00C 22.70702297	1.640849996	0.551883597	2.973181308	0.002947303	0.016233624	Tubb3
ENSMUSG00C 423.2320661	0.336837073	0.113299576	2.972977338	0.002949262	0.016238671	Polr3a
ENSMUSG00C 108.5484466	0.539873594	0.181619071	2.972560042	0.002953274	0.016249271	Strada
ENSMUSG00C 829.2438351	0.401852556	0.135263937	2.970877269	0.002969504	0.016327031	Pou2f1
ENSMUSG00C 1535.460627	0.270185615	0.090991666	2.969344641	0.002984357	0.01639133	Dkc1
ENSMUSG00C 269.8765562	0.497534925	0.167765981	2.965648461	0.003020455	0.016577902	Zfp1
ENSMUSG00C 437.3132717	0.345442912	0.116487379	2.965496469	0.003021948	0.01658011	Mcur1
ENSMUSG00C 976.7947364	0.303991805	0.102584503	2.963330689	0.003043294	0.016668004	Pgam5
ENSMUSG00C 57.27837532	0.7512526	0.253616621	2.962158389	0.003054906	0.016725717	Zdhhc14
ENSMUSG00C 152.9438406	0.555969866	0.187742679	2.961339788	0.003063038	0.01675257	Lbhd1
ENSMUSG00C 611.2218251	0.304899913	0.102966794	2.961147977	0.003064946	0.016757121	Mrlp11
ENSMUSG00C 331.9617035	0.388817078	0.131360871	2.959915502	0.003077234	0.016818398	Slc36a1
ENSMUSG00C 715.0031478	0.492542608	0.166562823	2.957098096	0.003105493	0.016931244	Fire
ENSMUSG00C 936.7462782	0.279888794	0.094688491	2.955890308	0.003117679	0.016969327	Ubl4a
ENSMUSG00C 2232.055103	0.250336233	0.084687533	2.955998661	0.003116584	0.016969327	Wasf2
ENSMUSG00C 1097.45714	0.333481205	0.112820144	2.955865798	0.003117927	0.016969327	Sklv2l
ENSMUSG00C 31.17835914	1.022563654	0.345907332	2.956178029	0.003114772	0.016969327	Entpd3
ENSMUSG00C 6339.773893	0.316095131	0.107101962	2.951347701	0.003163905	0.017195522	Rpn2
ENSMUSG00C 1690.275125	0.303390397	0.1029094	2.948131035	0.003197015	0.017369408	Psmc5
ENSMUSG00C 594.1868329	0.380866355	0.129266429	2.946367106	0.003215305	0.017369408	Hgsnat

ENSMUSG000 816.4687785	0.282129759	0.095778274	2.9456655087	0.003222715	0.017478545	Kif4
ENSMUSG000 1050.112175	0.314084989	0.106655313	2.944860225	0.003231006	0.017478545	Tmem246
ENSMUSG000 573.4882965	0.428990925	0.145765568	2.943019613	0.003250278	0.017603507	Bysl
ENSMUSG000 393.6485011	0.384935477	0.130846042	2.941896227	0.003262092	0.017642945	Mettl1
ENSMUSG000 782.5621229	0.30580337	0.103954462	2.941705108	0.003264106	0.017647706	Plk4
ENSMUSG000 2412.990617	0.246896341	0.084006119	2.939028067	0.003292433	0.017763849	Thap12
ENSMUSG000 178.6122356	0.487897588	0.166031113	2.938591325	0.003297075	0.017782735	Anapc15
ENSMUSG000 39.42430885	0.921071621	0.313671073	2.93642513	0.00332019	0.017895006	Nlr1
ENSMUSG000 1093.695422	0.288395948	0.098228418	2.935972637	0.003325037	0.017912542	Dus1l
ENSMUSG000 756.8382625	0.319693976	0.108891056	2.935906645	0.003325744	0.017912542	Pla2g12a
ENSMUSG000 1919.191172	0.234060303	0.079728281	2.935724955	0.003327692	0.017916839	Dtx4
ENSMUSG000 11.58170807	1.843691605	0.628103691	2.935329995	0.003331931	0.017933461	Pthlh
ENSMUSG000 196.4831276	0.555105049	0.189190227	2.934110599	0.00334505	0.017997848	Map4k2
ENSMUSG000 1344.130423	0.258272776	0.088054459	2.933102744	0.003355928	0.018037679	Ndst1
ENSMUSG000 428.0764619	0.45573501	0.155404377	2.932575124	0.003361636	0.018060999	Chrac1
ENSMUSG000 186.2310586	0.421988301	0.144123892	2.927955221	0.003411992	0.018301111	Gm6510
ENSMUSG000 825.1034722	0.29211521	0.099775532	2.927723905	0.003414531	0.018308424	Prkd3
ENSMUSG000 903.839646	0.525445878	0.179518782	2.926968822	0.003422832	0.018340301	Nfix
ENSMUSG000 742.0548741	0.30257634	0.103434831	2.925284807	0.003441411	0.018433509	Ercc6l
ENSMUSG000 1302.382547	0.245032741	0.083770597	2.925044685	0.003444068	0.018439388	Casp3
ENSMUSG000 760.3588102	0.379576932	0.129851924	2.923152169	0.003465071	0.018528374	Grwd1
ENSMUSG000 69.99391272	0.688499121	0.235609896	2.922199502	0.003475688	0.018578765	Gm14035
ENSMUSG000 30.69818286	0.998862377	0.341853235	2.921904119	0.003478986	0.018590012	Syna
ENSMUSG000 12.86632047	1.791917302	0.613710704	2.919807801	0.003502473	0.018709095	Rpl10-ps3
ENSMUSG000 635.9531328	0.355904138	0.12194511	2.918560142	0.00351652	0.018771251	Pwp2
ENSMUSG000 387.2939734	0.577436	0.197916383	2.917575541	0.003527642	0.018811271	Ppp1r14b
ENSMUSG000 265.4847907	0.419394472	0.143783674	2.916843481	0.003535932	0.018846562	Thg1l
ENSMUSG000 535.0814978	0.385886223	0.132308507	2.91656397	0.003539101	0.018846562	Rnps1
ENSMUSG000 395.53494	0.470537789	0.161328293	2.91664767	0.003538152	0.018846562	Neil3
ENSMUSG000 15.12604062	1.451165602	0.497700833	2.915738747	0.003548475	0.018890018	D16Erd472e
ENSMUSG000 962.7242937	0.261465172	0.08973524	2.91374016	0.00357127	0.018991888	Rprd2
ENSMUSG000 835.8867794	0.319254873	0.109567277	2.913779398	0.003570821	0.018991888	Ppp1r10
ENSMUSG000 258.3836798	0.433551418	0.148847034	2.912731327	0.003582827	0.019040342	Rbm3-ps
ENSMUSG000 679.6722924	0.459384189	0.157889067	2.909537681	0.003619638	0.019229401	Espn
ENSMUSG000 164.0171065	0.475653889	0.163497292	2.909246278	0.003623013	0.019240771	Zfp13
ENSMUSG000 233.8170899	0.471037417	0.161918615	2.909099846	0.003624711	0.019243222	BC030867
ENSMUSG000 9.834068084	1.85459633	0.637583768	2.908788498	0.003628322	0.019255831	Gm37660
ENSMUSG000 142.7341909	0.477996441	0.16439535	2.907603178	0.003642102	0.019309216	Mettl22
ENSMUSG000 288.3421184	0.404967573	0.139333454	2.906463317	0.003655398	0.019366518	Gm15519
ENSMUSG000 87.46107472	0.596647704	0.205309414	2.906090332	0.003659758	0.019383023	Phf19
ENSMUSG000 25.71008528	1.092783789	0.376119462	2.905416758	0.003667644	0.019411541	Pcdh19
ENSMUSG000 29.10906568	1.064330265	0.366485086	2.9041571	0.003682433	0.019463398	Cd1d1
ENSMUSG000 22.72946251	1.151827072	0.396898907	2.902066628	0.003707097	0.019580463	Mfsd7a
ENSMUSG000 1642.302435	0.263575752	0.090925205	2.898819449	0.003745705	0.019777679	Supt6
ENSMUSG000 18.70983364	1.344943884	0.464393508	2.896129815	0.003777961	0.019920971	Gbp7
ENSMUSG000 512.3900815	0.303408575	0.104897857	2.892419194	0.003822875	0.020123728	Sept6
ENSMUSG000 83.059302	0.699251172	0.241841554	2.891360727	0.003835776	0.02016437	Gm5946
ENSMUSG000 413.3870036	0.371684689	0.128581204	2.890661131	0.003844324	0.020202487	Gm6781
ENSMUSG000 164.6362255	0.448847604	0.155315644	2.889905958	0.003853571	0.020232458	Ret
ENSMUSG000 454.2373319	0.598411623	0.20721995	2.887808938	0.003879354	0.020359092	Dus3l
ENSMUSG000 23.44342978	1.324695283	0.458998551	2.886055477	0.003901034	0.020452188	Ccdc187
ENSMUSG000 280.0077623	0.479754767	0.166241681	2.88588737	0.003903118	0.020456227	Baiap2
ENSMUSG000 439.3640582	0.424488271	0.14711058	2.885504705	0.003907866	0.020474221	5730455P16Rik
ENSMUSG000 500.0716521	0.381514908	0.132264295	2.884489025	0.003920494	0.020519669	Elac2
ENSMUSG000 1336.539057	0.261412184	0.090657447	2.883515825	0.003932629	0.020576265	Atf7ip
ENSMUSG000 564.9816548	0.332045792	0.115273598	2.880501675	0.003970428	0.020746155	Xyylt1
ENSMUSG000 11.97027679	1.590032676	0.552270795	2.879081586	0.003988351	0.020830328	Nmnat2
ENSMUSG000 191.8487268	0.443918192	0.154226779	2.87834703	0.003997651	0.02086739	Nphp1
ENSMUSG000 408.3598465	0.367766445	0.127843926	2.876682976	0.004018791	0.020956664	Sec22c
ENSMUSG000 498.3651161	0.312562457	0.108667902	2.876308929	0.004023557	0.020974492	Golga5
ENSMUSG000 490.2216788	0.294436925	0.102373018	2.876118447	0.004025986	0.02098013	Xrcc5
ENSMUSG000 219.5535145	0.422568031	0.147127516	2.872121009	0.004077268	0.021211875	Bhlha15
ENSMUSG000 184.2385266	0.451907317	0.157516565	2.868951064	0.004118355	0.021382763	Fbxl12
ENSMUSG000 1852.946262	0.452657097	0.157816425	2.868250865	0.004127481	0.02141283	Pigt
ENSMUSG000 480.8743761	0.312800139	0.109058363	2.868190296	0.004128271	0.02141283	Cntrl
ENSMUSG000 1772.404269	0.225598159	0.078666367	2.867784144	0.004133574	0.021418931	Hmgn1
ENSMUSG000 23.06277143	1.178297838	0.411270783	2.86501713	0.004169867	0.021585438	Catsperd
ENSMUSG000 253.9104568	0.410894804	0.143522629	2.862926964	0.004197473	0.021699486	Igslf1
ENSMUSG000 73.01680481	0.702627668	0.245416833	2.862997046	0.004196545	0.021699486	Dnah8
ENSMUSG000 1289.029836	0.255629623	0.089342607	2.861228615	0.004220026	0.021787145	Eaf1
ENSMUSG000 760.3174831	0.453563339	0.158516085	2.861307973	0.00421897	0.021787145	Usp36
ENSMUSG000 130.4292836	0.645813171	0.226018682	2.8573442	0.004272023	0.022004522	Ly6e-ps1
ENSMUSG000 489.9066357	0.365745102	0.128026248	2.856797786	0.004279384	0.022027863	Comm10
ENSMUSG000 1152.955264	0.354159914	0.123985858	2.856454116	0.004284019	0.022037153	Hes6
ENSMUSG000 509.2741654	0.39363698	0.137829903	2.855962102	0.004290663	0.022056758	Lrpap1
ENSMUSG000 68.23307281	0.646338613	0.226307512	2.856019259	0.004289891	0.022056758	Zfp446
ENSMUSG000 980.1017426	0.327222721	0.114603139	2.855268392	0.004300047	0.022097702	Notch1
ENSMUSG000 21.99075956	1.145550714	0.401389052	2.853966013	0.004317715	0.022173859	Map9
ENSMUSG000 803.6050238	0.391821379	0.137298991	2.853781934	0.004320217	0.022178795	Mthfd11
ENSMUSG000 151.953022	0.558326592	0.195837417	2.850969947	0.004358609	0.022332313	Pacsin3
ENSMUSG000 11.28996852	1.770783594	0.621534687	2.849050313	0.004384995	0.022437972	Scube1
ENSMUSG000 902.6604929	0.25131499	0.088223455	2.848618768	0.004390946	0.022461045	Senp3
ENSMUSG000 17.97377133	1.275615912	0.447993957	2.847395356	0.004407858	0.022532752	Rpgrip1
ENSMUSG000 11.04913467	1.657256207	0.582056863	2.847241074	0.004409995	0.022536277	Eomes
ENSMUSG000 130.8525019	0.501347931	0.176130306	2.846460346	0.004420823	0.0225842	1110051M20Rik
ENSMUSG000 1855.064775	0.265946436	0.093452581	2.845790161	0.004430138	0.022616943	Srrt
ENSMUSG000 15.89368552	1.374270624	0.483088917	2.844757096	0.00444453	0.02267555	Piwi4
ENSMUSG000 445.2025416	0.325451261	0.114536234	2.841469891	0.004490609	0.022858214	Zfp710
ENSMUSG000 957.4958055	0.315352821	0.111026007	2.840350929	0.004506393	0.022923569	Polr1b
ENSMUSG000 328.4845993	0.34870185	0.122786832	2.839896126	0.004512823	0.022948779	Crtc2
ENSMUSG000 70.27307655	0.70881019	0.249639922	2.839330282	0.004520834	0.022967015	Tctn2
ENSMUSG000 55.79746561	0.748742012	0.26386072	2.837641053	0.004544826	0.022967015	Ache



ENSMUSG00C 347.2457337	0.353601976	0.124618765	2.837469744	0.004547266	0.023056162	Tor1b
ENSMUSG00C 522.8322375	0.380259243	0.134054337	2.836605296	0.004559594	0.023186619	Cpsf4
ENSMUSG00C 353.7057658	0.360791252	0.127200498	2.83639812	0.004562553	0.023186619	Vamp2
ENSMUSG00C 581.3651725	0.344609297	0.121533266	2.835514159	0.004575199	0.023167616	Tut1
ENSMUSG00C 231.2887282	0.539913872	0.190500824	2.834181291	0.004594326	0.02324935	Sars2
ENSMUSG00C 3199.346964	0.279901162	0.098809896	2.832723997	0.004615322	0.023332849	Limk2
ENSMUSG00C 8.271546	2.309325014	0.815388337	2.832178128	0.004623209	0.023365135	Ceacam12
ENSMUSG00C 14.82894725	1.418780643	0.501329159	2.830038145	0.004654245	0.02351436	443040218Rik
ENSMUSG00C 278.4967047	0.365708113	0.129332223	2.827664318	0.004688894	0.023674052	Pcdhgc3
ENSMUSG00C 228.7842982	0.514189779	0.181929471	2.82631383	0.004708711	0.023766397	Cenpt
ENSMUSG00C 988.3532665	0.250594223	0.088678136	2.825885102	0.004715017	0.023790517	Grk6
ENSMUSG00C 223.1360723	0.474011607	0.167790162	2.825026219	0.004727675	0.023838932	Ccdc120
ENSMUSG00C 247.2605702	0.462651214	0.163794516	2.824583051	0.004734218	0.023856474	Rhbdd3
ENSMUSG00C 4927.716545	0.246292589	0.087219029	2.823840083	0.004745205	0.023896376	Lgr5
ENSMUSG00C 77.48345921	0.652713503	0.231279085	2.822189919	0.004769692	0.024004162	Gm17709
ENSMUSG00C 89.24811807	0.8937175	0.31672748	2.821723901	0.004776628	0.024031301	Ppia
ENSMUSG00C 14598.8662	0.204823127	0.072655981	2.819081449	0.00481613	0.024198759	Aldh1b1
ENSMUSG00C 388.325387	0.311295723	0.11050803	2.816951161	0.00484819	0.024344135	Fancd2
ENSMUSG00C 16381.96379	0.540243521	0.191946002	2.814559902	0.004884407	0.024518087	mt-Nd5
ENSMUSG00C 323.9420674	0.426930851	0.151692615	2.814447179	0.004886121	0.024518783	Tssc4
ENSMUSG00C 318.2300729	0.432206436	0.153579492	2.814219734	0.004889579	0.024528234	Rsl24d1
ENSMUSG00C 21.22039161	1.343441889	0.477491595	2.813540392	0.004899923	0.024548488	Mr1
ENSMUSG00C 462.3937234	0.31444477	0.111755957	2.813673455	0.004897895	0.024548488	Fam160b1
ENSMUSG00C 45.30431708	0.889198278	0.316075967	2.813242294	0.004904468	0.024563355	Ccdc92
ENSMUSG00C 379.9029253	0.393660124	0.139961562	2.812630265	0.004913812	0.024586427	Setd1a
ENSMUSG00C 670.9674915	0.29165876	0.103702614	2.812453311	0.004916516	0.024592056	Vps11
ENSMUSG00C 26.05013176	1.026312187	0.364960028	2.812122171	0.004921581	0.024609484	Gm7334
ENSMUSG00C 471.9764242	0.467246215	0.166165397	2.811934505	0.004924453	0.024615941	Amn
ENSMUSG00C 38.56688079	1.226630647	0.436470574	2.810339847	0.004948921	0.024722378	A930004J17Rik
ENSMUSG00C 3190.456651	0.229374633	0.081625488	2.810085883	0.004952828	0.024727154	Dync1h1
ENSMUSG00C 495.655286	1.409434085	0.502542218	2.804608322	0.005037776	0.025085771	Ifi27
ENSMUSG00C 758.9288848	0.266990413	0.095244649	2.803206452	0.005059727	0.025170929	Rfc5
ENSMUSG00C 2298.913347	0.211454254	0.075493267	2.800968399	0.005094951	0.025305735	Psmd1
ENSMUSG00C 55.7940469	0.822852612	0.293771818	2.800992338	0.005094573	0.025305735	Slc30a3
ENSMUSG00C 8.039692232	1.97793092	0.706158757	2.800972022	0.005094894	0.025305735	Snord69
ENSMUSG00C 9.031777826	2.094230953	0.748273194	2.798751807	0.005130055	0.025455733	Gm21049
ENSMUSG00C 78.71558514	0.602015143	0.215215644	2.797264787	0.005153728	0.025565051	Rnf125
ENSMUSG00C 865.0244456	0.252796716	0.090477407	2.794031409	0.005205542	0.025797421	Sf3a3
ENSMUSG00C 218.7701854	0.43481576	0.155649611	2.793555079	0.005213215	0.025819011	Pyh191
ENSMUSG00C 508.5883936	0.376912056	0.134977695	2.792402523	0.005231823	0.025886467	Pde3b
ENSMUSG00C 9.28260282	1.928120746	0.690607762	2.791918729	0.005239651	0.025916967	Plscr4
ENSMUSG00C 1392.614117	0.29522142	0.105826727	2.789667866	0.005276214	0.026070995	Fbxw8
ENSMUSG00C 47.64879811	0.8897198	0.318942897	2.789589633	0.005277489	0.026070995	Gm19031
ENSMUSG00C 442.665748	0.528883876	0.189606642	2.789374199	0.005281001	0.026080071	Tmem132a
ENSMUSG00C 13.44345515	0.372802692	0.531908276	2.788643754	0.005292925	0.026122389	Pax4
ENSMUSG00C 602.2781399	0.306898218	0.11007013	2.788206206	0.00530008	0.026149411	Arfgap1
ENSMUSG00C 370.3943595	0.372863103	0.1338046	2.786623944	0.005326025	0.026235852	Gm14780
ENSMUSG00C 16.37305954	1.374688344	0.493347171	2.786452268	0.005328847	0.026241451	Slc45a3
ENSMUSG00C 698.579599	0.416894236	0.149623039	2.786297079	0.005331399	0.026245719	Ggact
ENSMUSG00C 3531.100926	0.369671762	0.132682203	2.786144293	0.005333912	0.026249794	Vars
ENSMUSG00C 135.5991282	0.459248145	0.16489978	2.785013689	0.005352546	0.026333175	Enpp4
ENSMUSG00C 70.17284084	0.724896162	0.260337578	2.784446898	0.00536191	0.026362583	Unc5a
ENSMUSG00C 933.0827359	0.248132989	0.089120606	2.784238133	0.005365363	0.026371232	Mtss1
ENSMUSG00C 171.849133	0.538138789	0.193317106	2.783710145	0.005374104	0.026405859	Entpd8
ENSMUSG00C 410.0773192	0.312502919	0.11233288	2.781936334	0.005403564	0.026533868	Slc52a3
ENSMUSG00C 129.6295265	0.478258157	0.171988282	2.780760119	0.005423179	0.026604672	Cenpn
ENSMUSG00C 505.2287618	0.291281582	0.104752601	2.780662057	0.005424818	0.026604672	Rnf167
ENSMUSG00C 1013.4598	0.345373304	0.124223831	2.780249977	0.005431707	0.026630072	Ints5
ENSMUSG00C 79.51517702	0.617286929	0.222261261	2.777303281	0.005481201	0.026813628	Gm17491
ENSMUSG00C 261.821097	0.391256472	0.140898736	2.776862894	0.005488633	0.026841551	BC048403
ENSMUSG00C 8094.015476	0.340254348	0.122561349	2.776196166	0.005499901	0.026865747	Top2a
ENSMUSG00C 25.05753966	1.03384632	0.372398845	2.77618025	0.005500171	0.026865747	Id4
ENSMUSG00C 900.8821572	0.32732232	0.117916246	2.775888234	0.005505113	0.026879935	Zbtb38
ENSMUSG00C 40.3209156	0.839649194	0.302642482	2.774393037	0.005530482	0.026986879	3010003L21Rik
ENSMUSG00C 350.7133122	0.475960019	0.171597184	2.773705301	0.005542186	0.027027052	Sapcd2
ENSMUSG00C 1011.726161	0.244420894	0.088172717	2.772069421	0.005570116	0.027103834	Spag5
ENSMUSG00C 918.001729	0.262533044	0.094705026	2.772113112	0.005569368	0.027103834	Wipi2
ENSMUSG00C 914.033265	0.242911178	0.087618227	2.772381812	0.005564772	0.027103834	Cd9
ENSMUSG00C 102.8985133	0.53239643	0.192052487	2.77214025	0.005568904	0.027103834	Gm9938
ENSMUSG00C 323.830856	0.345538002	0.124663576	2.771763928	0.005575345	0.027120807	Fastkd3
ENSMUSG00C 1977.026619	0.21943435	0.07918251	2.771247722	0.005584193	0.027146882	Sort1
ENSMUSG00C 288.0593277	0.429294644	0.154980219	2.769996362	0.005605692	0.027225898	Card14
ENSMUSG00C 18.4216732	1.26990647	0.458476436	2.769840219	0.00560838	0.027230459	2210417A02Rik
ENSMUSG00C 2224.324427	0.205921075	0.07434702	2.769728693	0.0056103	0.027231293	Cdk1
ENSMUSG00C 4491.631387	0.19959944	0.072076265	2.769281136	0.005618014	0.027243254	Add3
ENSMUSG00C 1738.4207	0.472778194	0.170756009	2.768735319	0.005627433	0.027266885	Baiap2l2
ENSMUSG00C 17.78717804	1.237272227	0.446879306	2.768694392	0.00562814	0.027266885	Eil3
ENSMUSG00C 43.72561405	0.831729108	0.300586357	2.767022146	0.005657091	0.027381588	Arl6
ENSMUSG00C 9.950210114	1.992380956	0.720588835	2.764934537	0.005693422	0.027537444	Gm15915
ENSMUSG00C 8.092191851	2.106257417	0.761905892	2.764458758	0.005701731	0.027554829	Dact1
ENSMUSG00C 64.72637517	0.689958942	0.249640333	2.763811981	0.005713045	0.027600937	Pros1
ENSMUSG00C 437.4521712	0.345257387	0.12500003	2.762058424	0.00574382	0.027723813	Gm5648
ENSMUSG00C 292.6859942	0.35159988	0.127383903	2.760159421	0.005777316	0.027850957	Tmed1
ENSMUSG00C 49.89872472	0.792250158	0.287296636	2.757603325	0.005822681	0.028023275	Gm26982
ENSMUSG00C 165.7397385	0.552561153	0.200465286	2.756393217	0.005844269	0.028104112	Slc1a3
ENSMUSG00C 122.2037813	0.627276466	0.227585543	2.756222811	0.005847315	0.028110078	Gm15207
ENSMUSG00C 1727.954283	0.220395578	0.080005193	2.754765906	0.005873414	0.028226831	Scml4
ENSMUSG00C 80.41838288	0.576442788	0.209378108	2.753118717	0.005903049	0.028325538	Mks1
ENSMUSG00C 916.7852786	0.285972944	0.103868882	2.753210952	0.005901386	0.028325538	Casc3
ENSMUSG00C 542.0404077	0.301598336	0.109627417	2.751121427	0.005939162	0.028472505	Tox
ENSMUSG00C 573.1353933	0.279085956	0.101449465	2.750984999	0.005941636	0.028475599	Ptptrj
ENSMUSG00C 92.6725291	0.589213376	0.214297682	2.749508868	0.005968465	0.028475599	Dio1

ENSMUSG00C 148.4960809	0.510355917	0.185677764	2.748610843	0.00598484	0.028647383	Pttg1
ENSMUSG00C 752.0749681	0.288703611	0.105065163	2.747852884	0.005998692	0.028647383	Plekha7
ENSMUSG00C 682.9420595	0.288382705	0.104945418	2.747930403	0.005997274	0.028696046	Gtf3c2
ENSMUSG00C 17.5540229	1.213341515	0.441681488	2.747096148	0.006012551	0.028744681	Glis3
ENSMUSG00C 134.4162861	0.626916209	0.228233802	2.746815783	0.006017692	0.028760432	Elp6
ENSMUSG00C 670.9515082	0.25786503	0.093881348	2.746712043	0.006019596	0.028760702	Kank1
ENSMUSG00C 1330.508896	0.215138994	0.07833065	2.746549316	0.006022583	0.028765666	Vcp
ENSMUSG00C 136.7963357	0.456240479	0.166119821	2.746454201	0.00602433	0.028765666	Alg13
ENSMUSG00C 418.9010221	0.313771357	0.114284549	2.745527356	0.006041373	0.028838203	Unc93b1
ENSMUSG00C 843.2271754	0.407065298	0.148285695	2.745142063	0.006048471	0.028863236	Pmf1
ENSMUSG00C 1324.998621	0.252497792	0.091989404	2.744857354	0.00605372	0.028879437	Reep3
ENSMUSG00C 86.9973461	0.575254718	0.209697279	2.743262671	0.0060832	0.028993423	Prex1
ENSMUSG00C 33.58928568	0.885898336	0.323093398	2.741926457	0.006108002	0.02909638	Capn8
ENSMUSG00C 27.57118927	0.971859209	0.354456419	2.7418299	0.006109797	0.02909638	Ffar2
ENSMUSG00C 1184.787094	0.294574496	0.107481464	2.740700446	0.006130837	0.029157993	Ttyh2
ENSMUSG00C 193.0478554	0.470817812	0.171801161	2.740480965	0.006134934	0.029168565	Cdr2l
ENSMUSG00C 1096.181118	0.262849322	0.095956042	2.739268084	0.006157614	0.029249606	Ppp1r7
ENSMUSG00C 844.5987267	0.309328472	0.1129347	2.739002921	0.006162583	0.02926428	Rnf103
ENSMUSG00C 226.2803837	0.396160375	0.144713214	2.73755495	0.006189778	0.029375505	E130308A19Rik
ENSMUSG00C 564.1469373	0.267472483	0.097733675	2.736748454	0.006204972	0.029438641	Mtmr9
ENSMUSG00C 836.5999177	0.244943182	0.089541426	2.73552917	0.006228007	0.029538925	Hspa14
ENSMUSG00C 238.6929519	0.472167629	0.172627925	2.735175253	0.006234707	0.029552702	AU020206
ENSMUSG00C 831.4055921	0.475442894	0.173871904	2.734443484	0.006248582	0.029609456	Tubb2b
ENSMUSG00C 1348.269188	0.281198265	0.10285158	2.73401989	0.006256626	0.029624307	Nol9
ENSMUSG00C 391.5027928	0.428054546	0.156676243	2.732096063	0.006293279	0.029757864	Smg9
ENSMUSG00C 220.5548564	0.409260568	0.149796439	2.732111464	0.006292985	0.029757864	Twf2
ENSMUSG00C 30.70023104	0.979128335	0.358765392	2.729160497	0.006349579	0.029996753	Arhgap23
ENSMUSG00C 273.5749971	0.364406571	0.133555564	2.728501611	0.006362278	0.030047628	Vangl2
ENSMUSG00C 318.9128264	0.351843734	0.129040317	2.726618635	0.006398695	0.030192144	Parp10
ENSMUSG00C 121.0138785	0.475920891	0.174560728	2.726391534	0.006403099	0.030203775	Ninl
ENSMUSG00C 734.9633443	0.284233773	0.104268231	2.72598633	0.006410965	0.030231721	B4galnt4
ENSMUSG00C 6.84008181	2.1221789	0.779469538	2.722593761	0.006477165	0.030506938	Plekho1
ENSMUSG00C 1011.714105	0.239544026	0.087980811	2.722684903	0.006475379	0.030506938	Hexim1
ENSMUSG00C 305.3208398	0.430408375	0.158119698	2.722041463	0.006488	0.030541788	3110082I17Rik
ENSMUSG00C 8.525038652	1.933147312	0.710499695	2.720827786	0.006511868	0.030624068	Rsph9
ENSMUSG00C 14.8531487	1.445917403	0.531495714	2.720468606	0.006518946	0.03063885	Zfp941
ENSMUSG00C 787.8522002	0.327198683	0.120287808	2.720131736	0.006525591	0.030660828	Nectin1
ENSMUSG00C 1038.868294	0.245931853	0.09052821	2.716632234	0.006594984	0.030949519	Rbl1
ENSMUSG00C 15.20931141	1.460591939	0.53801902	2.714758929	0.006632403	0.031087642	D130017N08Rik
ENSMUSG00C 11.67268054	1.527300615	0.562760523	2.713944126	0.006648738	0.03114227	Slc14a1
ENSMUSG00C 777.7485072	0.364027945	0.13416101	2.713366168	0.006660347	0.031181075	Cep295
ENSMUSG00C 27.68087502	0.373697876	0.358956557	2.712578606	0.006676195	0.031245875	Duox2
ENSMUSG00C 1005.720976	0.240432765	0.088687584	2.711008187	0.006707897	0.031384815	Traf6
ENSMUSG00C 1279.013764	0.218014327	0.080425468	2.710762315	0.006712873	0.031389232	Ncoa6
ENSMUSG00C 2536.636677	0.245531035	0.090633418	2.709056342	0.006747488	0.031494345	Npc111
ENSMUSG00C 300.8155778	0.41288314	0.152403194	2.709150168	0.00674558	0.031494345	Unk
ENSMUSG00C 1080.180951	0.2481144893	0.091592319	2.70923257	0.006743905	0.031494345	Aldh5a1
ENSMUSG00C 595.7949356	0.327606938	0.120950118	2.708611971	0.006756531	0.031527103	Rpap1
ENSMUSG00C 452.7526116	0.288726051	0.106613621	2.708153511	0.006765872	0.031561232	Nufip1
ENSMUSG00C 144.3549815	0.461479848	0.17042666	2.707791423	0.006773258	0.031584474	Zc3hav1l
ENSMUSG00C 10.70642257	1.074746371	0.630706619	2.707243461	0.006784448	0.031619469	Fam46b
ENSMUSG00C 61.40548414	0.867337628	0.320633984	2.705070805	0.006828983	0.031807986	Cklf
ENSMUSG00C 274.8754719	0.435611183	0.161068419	2.704510203	0.006840517	0.03185218	Toe1
ENSMUSG00C 231.3074578	0.516505989	0.190993574	2.704310821	0.006844623	0.031861772	Pls3
ENSMUSG00C 523.713508	0.31820759	0.117731101	2.702833722	0.006875113	0.031988951	Ehd4
ENSMUSG00C 1605.172328	0.264273509	0.097778102	2.702788284	0.006876053	0.031988951	Otd4
ENSMUSG00C 762.169321	0.259476194	0.096204967	2.697118468	0.006994238	0.032519344	Got2-ps1
ENSMUSG00C 40.94311202	0.809772747	0.300295264	2.696588472	0.007005379	0.032561418	1700007L15Rik
ENSMUSG00C 460.5750627	0.290420344	0.107811125	2.693788267	0.007064503	0.032816638	Larp7
ENSMUSG00C 17.49573613	1.271626528	0.472085544	2.693635816	0.007067734	0.032821859	Rspo4
ENSMUSG00C 42.04178185	0.782840651	0.29068997	2.69304321	0.007080309	0.032870452	Zfp619
ENSMUSG00C 1922.662376	0.310116183	0.115175647	2.692549945	0.007090791	0.032909303	Krt7
ENSMUSG00C 906.1463366	0.304632705	0.113149959	2.69229179	0.007096283	0.032924977	Fam57a
ENSMUSG00C 356.2642396	0.321637328	0.119554058	2.690308736	0.007138594	0.033101564	Ttc19
ENSMUSG00C 588.5913528	0.383589326	0.142637855	2.68925332	0.007161205	0.033196525	Ptpmt1
ENSMUSG00C 733.7654145	0.29797798	0.1108167	2.688926676	0.007168216	0.033209252	lpo4
ENSMUSG00C 10.05618206	1.804447017	0.671384869	2.687649216	0.007195694	0.033316729	Col27a1
ENSMUSG00C 1276.853419	0.232275511	0.086477744	2.685957099	0.007232237	0.033475972	Mat2b
ENSMUSG00C 42.8778484	0.803342241	0.299119618	2.685688908	0.007238045	0.033476598	Glib1l
ENSMUSG00C 476.4847704	0.279896483	0.104219154	2.685652995	0.007238822	0.033476598	Shng5
ENSMUSG00C 259.8168997	0.443260536	0.165071744	2.685259904	0.007247342	0.033496103	Chf18
ENSMUSG00C 64.26219897	0.639130955	0.238007178	2.685343188	0.007245537	0.033496103	Hhat
ENSMUSG00C 306.0153899	0.364722475	0.135837547	2.684990142	0.007253195	0.033513202	Usp2
ENSMUSG00C 649.4609075	0.290453641	0.108294171	2.682080106	0.007316594	0.033776069	Ing5
ENSMUSG00C 16.3956323	1.365540062	0.509214458	2.681660035	0.007325787	0.033808483	lft57
ENSMUSG00C 31.89068808	0.952077461	0.355145875	2.680806758	0.007344491	0.033874726	Gm4788
ENSMUSG00C 7.683533614	2.009494327	0.749848339	2.679867677	0.007365127	0.03394979	H2afy2
ENSMUSG00C 1081.465451	0.30921163	0.11542432	2.678912294	0.007386174	0.03400602	Faah
ENSMUSG00C 795.755184	0.267810517	0.099973375	2.678818401	0.007388245	0.03400602	Ncapd3
ENSMUSG00C 12.8551204	1.482298879	0.553404079	2.678510941	0.007395032	0.034027198	Vav1
ENSMUSG00C 579.9712422	0.316572058	0.118229668	2.677602537	0.007415115	0.034099456	Man2c1
ENSMUSG00C 639.52847	0.39532449	0.147650542	2.677433379	0.00741886	0.034106607	Anapc11
ENSMUSG00C 1217.112937	0.378728797	0.141744477	2.671912197	0.007542038	0.034631989	Mvd
ENSMUSG00C 23.73576573	1.083027765	0.405594489	2.670223076	0.007580087	0.034796442	Gm17820
ENSMUSG00C 528.6676158	0.295658546	0.110760885	2.669340763	0.00760003	0.03487771	Epc2
ENSMUSG00C 156.3232847	0.452477995	0.169611036	2.667739105	0.007636353	0.035023757	Lmcd1
ENSMUSG00C 868.3587227	0.379970454	0.14245201	2.667357623	0.007645027	0.035042897	Nup214
ENSMUSG00C 419.5515786	0.285197867	0.106951958	2.666597911	0.007662328	0.03509558	lft17ra
ENSMUSG00C 730.8713056	0.324741623	0.121790878	2.666387062	0.007667136	0.035102905	Ddx52
ENSMUSG00C 953.4967001	0.25376994	0.095182858	2.66613071	0.007672985	0.035119358	Snrrp40
ENSMUSG00C 1075.033775	0.242381413	0.090933918	2.665467607	0.007688134	0.035157689	Gemin5
ENSMUSG00C 6.858516555	2.152378182	0.80779552	2.664508689	0.007710087	0.035231365	Kcnq4

ENSMUSG00C 28.06750474	0.958236341	0.359663424	2.664258518	0.007715824	0.035252009	Odf3b
ENSMUSG00C 15.90550225	1.403916123	0.526981086	2.664073076	0.007720079	0.035252009	Eda
ENSMUSG00C 66.74350243	0.635954628	0.238740233	2.663793284	0.007726503	0.035270998	Thumpd2
ENSMUSG00C 92.97916322	0.523914812	0.196752987	2.662804866	0.007749234	0.035333329	Gm9791
ENSMUSG00C 1422.912954	0.21870455	0.082177759	2.661359371	0.007782584	0.035454248	Ago1
ENSMUSG00C 469.3931243	0.313257416	0.117713208	2.661191744	0.00778646	0.03546153	Stat2
ENSMUSG00C 13.928516	1.330729401	0.500139237	2.660717864	0.007797426	0.03550109	Gm12860
ENSMUSG00C 4087.792977	0.226544317	0.085152045	2.6604683	0.007803207	0.035517024	Idh1
ENSMUSG00C 1856.668379	0.232251188	0.087321586	2.659722515	0.007820505	0.035585356	Akap1
ENSMUSG00C 7.531687778	1.975289525	0.742719302	2.659537082	0.007824812	0.035594549	Atoh8
ENSMUSG00C 19.80041703	1.226901542	0.461352434	2.659358553	0.00782896	0.035603017	Gm17092
ENSMUSG00C 17.0059636	1.256549387	0.472784948	2.657760978	0.007866166	0.035740902	Ddn
ENSMUSG00C 828.4171058	0.416973869	0.15692812	2.657101033	0.007881582	0.035790059	Gm19028
ENSMUSG00C 1789.587951	0.478772683	0.18019556	2.656961596	0.007884842	0.035794426	Rnf187
ENSMUSG00C 36.48037403	1.044705001	0.393307241	2.656205868	0.007902536	0.03586429	Prr36
ENSMUSG00C 1445.884896	0.356597885	0.134258877	2.656046972	0.00790626	0.035870739	Lrrc47
ENSMUSG00C 796.7725993	0.30947386	0.116529769	2.655749356	0.007913241	0.035891951	Cstf1
ENSMUSG00C 1320.837747	0.275614818	0.10379353	2.655414248	0.007921107	0.035917169	Pnn
ENSMUSG00C 2177.09757	0.217062297	0.081770835	2.654519763	0.007942139	0.03600205	Abcf1
ENSMUSG00C 2409.519153	0.401368827	0.151212063	2.654343971	0.007946278	0.03601033	Snrbp
ENSMUSG00C 765.7274699	0.245992903	0.092695383	2.653777291	0.007959634	0.036049873	Prpf4
ENSMUSG00C 120.2034181	0.48597754	0.183145283	2.65350836	0.00796598	0.036068122	Smrce1-ps1
ENSMUSG00C 543.6416947	0.289721611	0.109190181	2.653366884	0.00796932	0.036072755	Rcn2
ENSMUSG00C 278.6801291	0.3583356	0.135126178	2.65185922	0.008004991	0.036213166	Gm2272
ENSMUSG00C 295.0559001	0.361531413	0.136422479	2.650086822	0.008047109	0.036371998	Rbm3
ENSMUSG00C 321.4762427	0.337934028	0.127515142	2.650148241	0.008045646	0.036371998	Cenpi
ENSMUSG00C 2463.399657	0.233905917	0.088291249	2.649253683	0.008066975	0.036422571	Copg1
ENSMUSG00C 536.9439374	0.387510347	0.146273085	2.64922523	0.008067655	0.036422571	Blm
ENSMUSG00C 482.215422	0.361584431	0.136687866	2.645329409	0.008161143	0.036801955	Gm14016
ENSMUSG00C 69.76174054	0.619788002	0.234386324	2.644301051	0.008185981	0.03688192	Bex1
ENSMUSG00C 4269.445777	0.176147004	0.06663461	2.643476159	0.008205954	0.036950525	Epb41l3
ENSMUSG00C 728.8066813	0.258208755	0.097686829	2.643229968	0.008211924	0.036966715	Armrc10
ENSMUSG00C 27.31657884	1.191219808	0.450835316	2.642250432	0.008235714	0.037063091	Carmil3
ENSMUSG00C 51.36391746	0.700502735	0.265130142	2.642109005	0.008239153	0.037067385	Slc25a47
ENSMUSG00C 532.9908923	0.280287412	0.106140402	2.640723104	0.00827293	0.037187586	Daxx
ENSMUSG00C 412.18776	0.383221535	0.145191887	2.639414244	0.008304943	0.037276669	Cntrob
ENSMUSG00C 11.9428501	1.617146694	0.612677081	2.639476397	0.008303421	0.037276669	1810017P11Rik
ENSMUSG00C 1311.425642	0.442300908	0.167633273	2.638503084	0.008327294	0.037356468	Atp13a1
ENSMUSG00C 171.6885064	0.505914487	0.19177002	2.638131269	0.008336431	0.037365378	Pthrhd1
ENSMUSG00C 560.1792645	0.457999162	0.173607551	2.638129275	0.00833648	0.037365378	Psmb6-ps2
ENSMUSG00C 1271.808837	0.241056164	0.091391713	2.637615101	0.008349129	0.037411304	Htt
ENSMUSG00C 52.76747077	0.726448044	0.275580464	2.636065099	0.008387364	0.03753942	Mt4
ENSMUSG00C 1631.944743	0.235477788	0.089392236	2.634208511	0.008433368	0.037712801	Traf7
ENSMUSG00C 317.9638986	0.366138941	0.139024615	2.633626715	0.008447831	0.03775579	Zfp408
ENSMUSG00C 1313.934363	0.215486443	0.081849806	2.632705609	0.008470773	0.03783143	Gm14857
ENSMUSG00C 37.97717216	2.718713055	1.032803688	2.632361878	0.008479349	0.037853196	Shhg11
ENSMUSG00C 441.7585197	0.331732071	0.126030881	2.632149118	0.008484661	0.037864143	Eml3
ENSMUSG00C 1133.046774	0.216915371	0.082423224	2.631726355	0.008495226	0.037880629	Kansl3
ENSMUSG00C 1525.291747	0.208219927	0.079139795	2.631039502	0.008512414	0.037935547	Zwint
ENSMUSG00C 9.357885531	1.672392335	0.635853964	2.630151625	0.008534679	0.038023889	A4gnt
ENSMUSG00C 398.5327522	0.371043675	0.141097241	2.629701835	0.008545979	0.038063339	Atad5
ENSMUSG00C 340.9846033	0.395721468	0.15049554	2.629456448	0.008552149	0.038079927	Manbal
ENSMUSG00C 149.4860773	0.481685847	0.183353875	2.627082999	0.008612033	0.038335608	Tmem184c
ENSMUSG00C 259.9029575	0.474870362	0.180925391	2.62467506	0.008673169	0.03857467	Sp2
ENSMUSG00C 1522.708808	0.291168376	0.110939831	2.624561194	0.00867607	0.038576552	Gm12020
ENSMUSG00C 765.9858336	0.258560619	0.098528659	2.624217385	0.008684833	0.038604494	Cep57
ENSMUSG00C 841.7982825	0.299508929	0.114165899	2.623453521	0.008704332	0.038669088	Kif15
ENSMUSG00C 534.4946237	0.289924106	0.110545292	2.622672574	0.008724307	0.038735725	Pim3
ENSMUSG00C 556.9829232	0.338174594	0.129034228	2.620813085	0.008772034	0.03890326	Baz2b
ENSMUSG00C 549.1227128	0.293924615	0.112164466	2.620478892	0.008780637	0.038930322	Lrp8
ENSMUSG00C 16135.57145	0.279683459	0.106899593	2.616319213	0.008888342	0.039318288	Tubb5
ENSMUSG00C 39.82268843	0.768009529	0.293711287	2.614845129	0.008926792	0.039454749	Tnnt1
ENSMUSG00C 30.8696566	0.996704921	0.381408558	2.613221176	0.008969324	0.039609001	Krt80
ENSMUSG00C 107.3820281	0.508682243	0.194814783	2.611106988	0.009024965	0.039798283	Impact
ENSMUSG00C 1231.163886	0.244066138	0.093503951	2.610222717	0.009048329	0.03986744	Dnm1
ENSMUSG00C 1698.633047	0.217350036	0.083279947	2.60987241	0.0090576	0.039885715	Gpd1l
ENSMUSG00C 222.7725497	0.449471624	0.17221831	2.609894528	0.009057014	0.039885715	Pms2
ENSMUSG00C 267.8677122	0.394871831	0.151311468	2.609662282	0.009063165	0.039887659	AC122905.2
ENSMUSG00C 726.8393613	0.257378586	0.098657548	2.608807849	0.009085825	0.039976088	Thtpa
ENSMUSG00C 389.7065372	0.336382819	0.128959469	2.608438315	0.00909564	0.040007971	Ska3
ENSMUSG00C 180.5519401	0.422373367	0.162058423	2.606303074	0.009152544	0.040201483	Mcrs1
ENSMUSG00C 130.1128769	0.515388725	0.197825253	2.605272661	0.009180117	0.040288502	Haghl
ENSMUSG00C 303.4543647	0.31634996	0.12143953	2.60499987	0.009187429	0.04030399	Ifit4
ENSMUSG00C 496.0036942	0.416297094	0.159824453	2.604714648	0.00919508	0.040320078	Get4
ENSMUSG00C 1221.961218	0.227617519	0.087399739	2.604327217	0.009205482	0.040331616	Eif2b1
ENSMUSG00C 121.4356757	0.6771071	0.25998928	2.604365459	0.009204455	0.040331616	Mir17hg
ENSMUSG00C 2606.286956	0.351911812	0.135151485	2.603832366	0.009218783	0.040339207	Lzts3
ENSMUSG00C 17.82986692	1.180605698	0.453383424	2.603989552	0.009214557	0.040339207	Pkdrej
ENSMUSG00C 172.7904087	0.498824796	0.191603347	2.603424231	0.009229767	0.040369859	Spdef
ENSMUSG00C 502.4899582	0.271714262	0.104409714	2.602384894	0.009257789	0.040481052	Rbm8a2
ENSMUSG00C 22.47709775	1.026285313	0.394520078	2.601351287	0.009285731	0.040557679	Zbtb11os1
ENSMUSG00C 86.81015554	0.565974748	0.217683304	2.599991539	0.009322606	0.040661708	Ankrd44
ENSMUSG00C 13.00338079	1.402115384	0.539306608	2.599848328	0.009326497	0.040667289	Fndc4
ENSMUSG00C 317.3660337	0.324281828	0.1247701	2.599034781	0.00934863	0.040752385	Mphosph9
ENSMUSG00C 133.0993716	0.454181851	0.17478326	2.598543191	0.009362027	0.040782935	Smyd4
ENSMUSG00C 240.626483	0.454713665	0.174991547	2.598489317	0.009363496	0.040782935	Tbc1d10a
ENSMUSG00C 102.2240047	0.560781874	0.215796787	2.598657193	0.009358918	0.040782935	Tpcn2
ENSMUSG00C 2276.057911	0.349422901	0.13450748	2.597795319	0.00938244	0.040842599	Banf1
ENSMUSG00C 98.13805386	0.602490774	0.232158757	2.595167128	0.009454493	0.041072601	Slc39a13
ENSMUSG00C 255.6966185	0.435355534	0.167749503	2.595271675	0.009451618	0.041072601	Zfp362
ENSMUSG00C 21.68265384	1.068092514	0.411596128	2.595001362	0.009459054	0.041072765	Dnase1
ENSMUSG00C 2217.614877	0.397923516	0.153418973	2.593704735	0.009494799	0.041072765	Eif6

ENSMUSG000 56.76016664	0.631860772	0.243700018	2.592780983	0.009520338	0.041292807	Ccl6
ENSMUSG000 45.03513939	0.818709738	0.315834559	2.592210749	0.009536133	0.041454531	Mrvi1
ENSMUSG000 2520.898509	0.291418869	0.112444835	2.591660775	0.00955139	0.041392901	Psmb4
ENSMUSG000 408.4108818	0.330816916	0.12769615	2.590656934	0.009579293	0.041481182	Mettl13
ENSMUSG000 3055.437778	0.193934055	0.074859503	2.590640429	0.009579753	0.041481182	Srrm1
ENSMUSG000 502.6352635	0.406549348	0.156947183	2.590357722	0.009587624	0.041503726	Trmt61a
ENSMUSG000 2392.164058	0.204965616	0.079147431	2.589668584	0.009606837	0.041563784	Tjp2
ENSMUSG000 720.8713508	0.235612299	0.090991352	2.589392225	0.009614551	0.041574057	Rbm22
ENSMUSG000 9.379552061	1.675612669	0.647087443	2.589468683	0.009612417	0.041574057	Gm13858
ENSMUSG000 1349.112781	0.222272142	0.08584818	2.589130497	0.009621862	0.041582575	Tuba1c
ENSMUSG000 183.0183629	0.456165952	0.176280554	2.587727202	0.009661151	0.041740783	Nucb2
ENSMUSG000 90.77766324	0.542515734	0.209695511	2.587159501	0.009677079	0.041796435	Iqcb1
ENSMUSG000 648.5187249	0.281811912	0.108930631	2.587076841	0.0096794	0.041796435	Stk35
ENSMUSG000 52.00599963	0.778480799	0.30093039	2.586913198	0.009683998	0.041804297	Rundc3a
ENSMUSG000 2573.852057	0.286090736	0.110619978	2.586248352	0.009702699	0.041804297	Tuba4a
ENSMUSG000 9.642170658	1.602978832	0.619807527	2.586252607	0.009702579	0.041804297	Prr22
ENSMUSG000 37.25107043	0.997861585	0.385775169	2.586640263	0.009691672	0.041804297	Gm42786
ENSMUSG000 1383.673286	0.513612535	0.19860452	2.586106976	0.00970668	0.041809879	Tlnrd1
ENSMUSG000 636.7908806	0.272878202	0.105533276	2.585707663	0.009717931	0.041846767	Med17
ENSMUSG000 15.96328358	1.368491908	0.529305422	2.585448495	0.00972524	0.041866662	Rpl31-ps1
ENSMUSG000 1701.874395	0.299337287	0.115803621	2.584869846	0.009741576	0.041913812	Akap11
ENSMUSG000 250.1524634	0.527732022	0.204227567	2.584039126	0.009765072	0.041991696	Nsun5
ENSMUSG000 256.7412932	0.522523722	0.202243479	2.583636938	0.009776465	0.042017481	Parp12
ENSMUSG000 542.5882339	0.258754835	0.100213714	2.582030185	0.009822099	0.042201962	Sprtn
ENSMUSG000 668.2723065	0.262258504	0.101703733	2.578651693	0.009918674	0.042545658	Adnp2
ENSMUSG000 22.8456942	1.00773226	0.390979177	2.577457621	0.009953009	0.042670236	Zfp69
ENSMUSG000 17.57583393	1.188315077	0.461155879	2.576818667	0.009971425	0.042725661	1810059H22Rik
ENSMUSG000 467.5443483	0.274904273	0.106745479	2.575324741	0.010014601	0.04289886	Scyl3
ENSMUSG000 61.32807911	0.609241659	0.236719597	2.573684929	0.010062186	0.043078992	Gm15428
ENSMUSG000 575.0134216	0.265026874	0.103020824	2.572556354	0.010095052	0.043195948	Arih2
ENSMUSG000 2621.49656	0.367400591	0.142846569	2.571994506	0.010111145	0.043230473	Psmd3
ENSMUSG000 742.8118535	0.315172114	0.122538574	2.572023689	0.010110597	0.043230473	Cep192
ENSMUSG000 626.1927812	0.30029631	0.116771018	2.571668173	0.010120985	0.043247489	Ublqn2
ENSMUSG000 157.209984	0.50335596	0.196092351	2.566933165	0.010260239	0.043770459	Barx2
ENSMUSG000 165.3721851	0.414618283	0.161600722	2.565695729	0.010296911	0.043914873	Pradc1
ENSMUSG000 1025.861523	0.608530511	0.237251823	2.564913946	0.01032014	0.044001888	Malat1
ENSMUSG000 95.54848924	0.497025115	0.193836204	2.564150059	0.010342882	0.044062657	Arv1
ENSMUSG000 1170.588204	0.243884649	0.095112922	2.564158941	0.010342617	0.044062657	Cbx6
ENSMUSG000 401.2135637	0.308607433	0.120402704	2.563127102	0.010373407	0.04416853	Tnfaiip811
ENSMUSG000 153.3608048	0.419261498	0.163600877	2.56270935	0.010385895	0.044209616	Borcs7
ENSMUSG000 440.6216996	0.359842955	0.140470004	2.561706723	0.010415923	0.04430262	Bola3
ENSMUSG000 23.22039738	1.115072016	0.435469369	2.560621013	0.010448527	0.044415509	Peli2
ENSMUSG000 272.623745	0.336086415	0.131258739	2.560487907	0.01045253	0.0444204	Gm16425
ENSMUSG000 31.99339965	0.894612761	0.349423653	2.560252438	0.010459616	0.044432513	Anxa9
ENSMUSG000 210.5708143	0.39710254	0.155150078	2.559473672	0.01048308	0.04451378	Gm9577
ENSMUSG000 93.27732055	0.502026952	0.19620071	2.558741772	0.010505174	0.044583284	Gnb5
ENSMUSG000 79.41820759	0.619268106	0.242095007	2.55795489	0.010528975	0.04463563	Prx
ENSMUSG000 1206.740978	0.344273178	0.13467649	2.556297534	0.010579262	0.044800023	Cherp
ENSMUSG000 15.3838979	1.242721756	0.48645608	2.55464328	0.010629667	0.044976779	Gm18935
ENSMUSG000 720.5023393	0.262032053	0.102577822	2.554470825	0.010634934	0.044986841	Myo5c
ENSMUSG000 145.0949442	0.684735178	0.268082425	2.554196448	0.010643319	0.045010081	Fmo1
ENSMUSG000 238.0744479	0.342299039	0.134095847	2.552644593	0.010690852	0.045186554	Cdc25c
ENSMUSG000 1154.426127	0.222151119	0.087071246	2.551371773	0.01072998	0.045327325	Nudt19
ENSMUSG000 30.87164099	0.9472751	0.371548409	2.549533455	0.010786716	0.045517603	Edn1
ENSMUSG000 102.9820349	0.51260402	0.201139306	2.548502477	0.010818652	0.045627635	Arntl2
ENSMUSG000 22.26360456	1.119280233	0.439300551	2.54786895	0.010838318	0.045698198	Gm6329
ENSMUSG000 63.22141313	0.782907932	0.307301974	2.547682732	0.010844104	0.045710219	1700001O22Rik
ENSMUSG000 25.23674067	1.017061179	0.399314008	2.547021038	0.010864688	0.045772203	Adat3
ENSMUSG000 5503.497372	0.345917622	0.135858653	2.546158193	0.010891582	0.045873092	Dhcr24
ENSMUSG000 736.9722485	0.342972749	0.127608925	2.545219693	0.0109209	0.045971706	Fbxw5
ENSMUSG000 31.18125666	0.851225888	0.334684992	2.543364381	0.010979067	0.046204067	Cyp4f15
ENSMUSG000 220.3966832	0.442686678	0.174204992	2.541182507	0.011047823	0.046468303	Atp2c2
ENSMUSG000 22.00635112	1.061390679	0.417787367	2.540504482	0.011069267	0.0465208	Sic25a27
ENSMUSG000 8.819301324	1.672158092	0.658377773	2.539815529	0.011091095	0.046599957	Cyp4f39
ENSMUSG000 177.5509041	0.419682351	0.165308725	2.538779184	0.011124001	0.046700409	Kcnh3
ENSMUSG000 14.94541869	1.270269409	0.50037098	2.538655235	0.011127942	0.046704364	Rapgef3
ENSMUSG000 942.8554788	0.255406824	0.100621081	2.538303305	0.01113914	0.046727854	Ripk3
ENSMUSG000 41.253074	0.795061011	0.313241786	2.538170342	0.011143373	0.046727854	Kcnk16
ENSMUSG000 97.61301478	0.896738393	0.353310592	2.538102205	0.011145543	0.046727854	Al480526
ENSMUSG000 9.840883267	1.620922682	0.638883777	2.537116672	0.01117697	0.046801248	Mat1a
ENSMUSG000 2261.801585	0.228445247	0.090032986	2.537350558	0.011169504	0.046801248	Smardc2
ENSMUSG000 21.73313049	1.066704143	0.420445279	2.537081985	0.011178077	0.046801248	4933406C10Rik
ENSMUSG000 496.0605322	0.342139015	0.134884551	2.536532261	0.011195643	0.046862189	Apiin1
ENSMUSG000 12.51697859	1.999722952	0.789096888	2.534191914	0.011270699	0.047138342	Apol9b
ENSMUSG000 165.3740052	0.43112566	0.170182252	2.533317396	0.011298859	0.047239066	Znhit3
ENSMUSG000 1209.068179	0.399094042	0.157629857	2.531842952	0.01134648	0.04736623	Pold2
ENSMUSG000 1220.11774	0.370875827	0.146563249	2.530483112	0.011390557	0.047510199	Sic35a4
ENSMUSG000 41.70207177	0.792373391	0.313336478	2.528825866	0.011444479	0.04768584	Crybg3
ENSMUSG000 4634.621323	0.17009965	0.067277094	2.527006435	0.01150394	0.047869546	Lpo5
ENSMUSG000 650.7500896	0.320307688	0.12677205	2.526642807	0.011515856	0.047898046	Ahrgef1
ENSMUSG000 344.7500051	0.408418403	0.16168305	2.526043406	0.011535523	0.047949713	Mpg
ENSMUSG000 247.4418926	0.333853899	0.13226206	2.524184929	0.011596691	0.048178247	Gm6159
ENSMUSG000 1709.231087	0.218801362	0.086715157	2.523219338	0.011628584	0.048297863	Ptpkr
ENSMUSG000 1232.343219	0.320844651	0.127236462	2.521640771	0.011680893	0.048476328	Odc1
ENSMUSG000 329.122376	0.557431245	0.2210491	2.521753066	0.011677165	0.048476328	Zfp628
ENSMUSG000 479.1393962	0.328500445	0.130324529	2.520634056	0.011714361	0.048589321	Cks1b
ENSMUSG000 14.37138066	1.292140256	0.512893528	2.519314802	0.011758348	0.04871986	4732490B19Rik
ENSMUSG000 1204.8906	0.214847051	0.085340402	2.517530344	0.011818079	0.048902287	Sic25a44
ENSMUSG000 231.5002491	0.405918124	0.161273855	2.516949343	0.011837585	0.048956981	Zfp810
ENSMUSG000 319.7144121	0.31532075	0.125300473	2.516516836	0.011852124	0.049004094	Pex12
ENSMUSG000 409.0771624	0.294961764	0.117281757	2.514984189	0.011903772	0.049178466	Fbf1
ENSMUSG000 31.19552385	0.954368607	0.3794915	2.514861618	0.011907911	0.049219196	Gm16845



Table S3

ENSMUSG00C 60.46481356	0.639006336	0.254169192	2.514098314	0.011933716	0.049262962	Gpsm1
ENSMUSG00C 146.9040075	0.414148156	0.164742354	2.513914287	0.011939945	0.049326172	Serpinb5
ENSMUSG00C 119.2809466	0.494937908	0.196929686	2.513272217	0.0119617	0.049326172	Cenps
ENSMUSG00C 83.329722	0.556730513	0.221638035	2.511890672	0.012008629	0.04948038	Trmt112-ps2
ENSMUSG00C 234.7968376	0.376138333	0.149843958	2.510200203	0.012066273	0.049652203	Kpna2
ENSMUSG00C 13.52351706	1.383444097	0.551742098	2.507410804	0.012161927	0.04999297	Tomm6os

Table S4 Downregulated genes in intestinal organoids from H2b/p53dIEC vs. H2bdlIEC

Genelid	baseMean	log2FoldChange	lfcSE	stat	pvalue	padj	genenames
ENSMUSG000000054932	718.5110052	-3.495837657	0.127329549	-27.45503845	6.049E-166	9.4189E-162	Alp
ENSMUSG000000023067	2397.820919	-2.159456833	0.082215629	-26.26577049	4.7213E-152	3.6758E-148	Cdkn1a
ENSMUSG000000027663	1224.955442	-2.416238776	0.095825955	-25.21486782	2.752E-140	1.4284E-136	Zmat3
ENSMUSG000000020326	4238.172627	-2.805401455	0.116727375	-24.03379197	1.2334E-127	4.8012E-124	Ccng1
ENSMUSG000000069045	408.8964334	-5.911418254	0.262936211	-22.48232842	6.1811E-112	1.9249E-108	Ddx3y
ENSMUSG000000021185	1310.174206	-1.729803118	0.083556723	-20.70214173	3.31315E-95	7.36986E-92	Dglucy
ENSMUSG000000059552	672.4483888	-3.124815237	0.156166465	-20.00951512	4.55053E-89	8.85704E-86	Trp53
ENSMUSG000000041801	343.9335113	-5.448105551	0.292038308	-18.65544829	1.14042E-77	1.97305E-74	Phlda3
ENSMUSG000000074445	1872.868412	-1.567045682	0.086155982	-18.1884722	6.36909E-74	9.91731E-71	Sprr2a3
ENSMUSG000000035105	3679.689959	-1.619369302	0.090047569	-17.98348721	2.62454E-72	3.40556E-69	Egln3
ENSMUSG000000020101	511.3620169	-1.998361153	0.111763348	-17.88029077	1.67959E-71	2.01176E-68	Vsir
ENSMUSG000000021196	4383.391068	-1.18110887	0.076400877	-15.45936282	6.52407E-54	6.34914E-51	Pfkfb
ENSMUSG000000056673	297.044203	-8.080174266	0.530384706	-15.23455367	2.08546E-52	1.91016E-49	Kdm5d
ENSMUSG000000034457	222.9485679	-7.497627417	0.49914324	-15.02099361	5.34997E-51	4.62802E-48	Eda2r
ENSMUSG000000028211	695.314996	-2.117019066	0.14542443	-14.55752011	5.23216E-48	4.0735E-45	Trp53inp1
ENSMUSG000000000394	1324.369105	-1.8778442	0.130805859	-14.35596399	9.77567E-47	7.24843E-44	Gcg
ENSMUSG000000026773	792.310738	-1.361633579	0.096404956	-14.12410352	2.69812E-45	1.82662E-45	Pfkfb3
ENSMUSG000000029378	1058.117289	-2.115766355	0.152232668	-13.89824131	6.49169E-44	4.04328E-41	Areg
ENSMUSG000000039114	625.6146169	-2.26951419	0.163432777	-13.88653015	7.64501E-44	4.57848E-41	Nrn1
ENSMUSG000000068744	252.7615465	-1.997682005	0.144270486	-13.84678226	1.3304E-43	7.67244E-41	Psirc1
ENSMUSG000000032135	97.73638551	-4.269985168	0.310966582	-13.73133133	6.59111E-43	3.53897E-40	Mcam
ENSMUSG000000027876	1826.580866	-1.039909546	0.076358465	-13.61878542	3.09675E-42	1.60732E-39	Reg4
ENSMUSG000000072594	528.8118339	-1.522128292	0.11476099	-13.26346427	3.77066E-40	1.83478E-37	Gm16439
ENSMUSG000000068457	289.1037733	-8.725385824	0.675824174	-12.91073352	3.91553E-38	1.74196E-35	Uty
ENSMUSG000000005125	10811.23906	-1.065498752	0.083785211	-12.7170266	4.75617E-37	2.05717E-34	Ndrp1
ENSMUSG000000029763	947.8172235	-1.188113509	0.093538448	-12.70187324	5.77311E-37	2.42954E-34	Exoc4
ENSMUSG000000069049	701.4367425	-10.74421373	0.849484045	-12.64792881	1.14863E-36	4.70667E-34	Eif2s3y
ENSMUSG000000019916	809.7553698	-1.283539432	0.102359641	-12.53950697	4.5381E-36	1.81187E-33	Pha1a
ENSMUSG000000020183	112.1956192	-2.837407544	0.228120471	-12.43819782	1.6212E-35	6.15702E-33	Cpm
ENSMUSG000000044313	206.9463782	-1.959329234	0.158747428	-12.34243137	5.3515E-35	1.98401E-32	Msh2113
ENSMUSG000000029657	1170.694871	-1.076814906	0.087267405	-12.33925657	5.56675E-35	2.01581E-32	Hspb1
ENSMUSG000000073643	1035.815544	-1.327518149	0.108922992	-12.1876761	3.61586E-34	1.2796E-31	Wdfy1
ENSMUSG000000038508	261.6617149	-3.074075737	0.254979749	-12.0561564	1.79988E-33	6.228E-31	Gdf15
ENSMUSG000000015839	3713.090438	-1.121666336	0.093084018	-12.05004211	1.93851E-33	6.56185E-31	Nfe2l2
ENSMUSG000000035239	526.5442398	-2.021038037	0.168192777	-12.01619994	2.92098E-33	9.47555E-31	Neu3
ENSMUSG000000031788	667.9254735	-1.221195373	0.104142727	-11.72617055	9.35982E-32	2.80273E-29	Kifc3
ENSMUSG000000069793	1373.120146	-1.420859115	0.122800601	-11.57045736	5.81717E-31	1.70904E-28	Slnf9
ENSMUSG000000037573	1467.270897	-0.921870291	0.080160314	-11.50033277	1.31408E-30	3.78917E-28	Tob1
ENSMUSG000000046818	65.83384545	-3.871430098	0.339589627	-11.40031905	4.1659E-30	1.13802E-27	Ddit4l
ENSMUSG000000060615	710.6764256	-1.229747276	0.108501943	-11.33387331	8.91722E-30	2.39397E-27	Ank1
ENSMUSG000000050914	437.1226875	-1.475109976	0.130657727	-11.2898794	1.47239E-29	3.88585E-27	Ankrd37
ENSMUSG000000028893	673.680518	-1.676694352	0.148805272	-11.26770801	1.89437E-29	4.83561E-27	Sesn2
ENSMUSG000000027954	1452.305415	-1.042656609	0.093014756	-11.2095828	3.65914E-29	9.04388E-27	Flna
ENSMUSG000000078566	906.8655058	-1.390508622	0.124897147	-11.13322963	8.64456E-29	2.07084E-26	Bnip3
ENSMUSG000000020137	700.1367025	-1.307571323	0.117544153	-11.12408646	9.5782E-29	2.25973E-26	Thap2
ENSMUSG000000020176	129.7357547	-2.245979889	0.20257067	-11.08738936	1.44442E-28	3.35687E-26	Grb10
ENSMUSG000000027313	308.7525041	-1.998465555	0.18179692	-10.99284607	4.13672E-28	9.20184E-26	Chac1
ENSMUSG000000043673	326.456699	-1.6072432	0.146433408	-10.97593246	4.98885E-28	1.0941E-25	Kcnc3
ENSMUSG000000055116	322.7601866	-1.345023757	0.124180133	-10.83123142	2.4484E-27	5.22248E-25	Arlt1
ENSMUSG000000046794	881.6631282	-1.459259757	0.136427547	-10.69622513	1.06009E-26	2.23064E-24	Ppp1r3b
ENSMUSG000000048458	91.02044113	-7.067662029	0.671936389	-10.51834988	7.1108E-26	1.4763E-23	Fam212b
ENSMUSG000000021701	231.4640509	-1.524403624	0.145134953	-10.50335286	8.33654E-26	1.708E-23	Plk2
ENSMUSG000000028527	1873.660857	-0.940501684	0.089603203	-10.4962954	8.98369E-26	1.81669E-23	Ak4
ENSMUSG000000030103	3070.726299	-0.80449669	0.077168911	-10.42513984	1.90379E-25	3.70549E-23	Bhlhe40
ENSMUSG000000030717	2076.806806	-0.879117824	0.085261915	-10.31079146	6.29805E-25	1.18153E-22	Nupr1
ENSMUSG000000039555	2211.039039	-1.014415779	0.098430174	-10.30594317	6.62387E-25	1.22442E-22	Fam162a
ENSMUSG000000050520	334.9027056	-1.482717978	0.145085504	-10.21961486	1.61983E-24	2.86618E-22	Cldn8
ENSMUSG000000038776	1666.625761	-0.926773694	0.091412388	-10.13838183	3.73231E-24	6.52986E-22	Ephx1
ENSMUSG000000025316	173.6098454	-1.677855349	0.167670743	-10.00684627	1.42214E-23	2.43342E-21	Banp
ENSMUSG000000086813	111.0462249	-2.044275254	0.204495403	-9.99680736	1.57591E-23	2.63855E-21	Gm13657
ENSMUSG000000018906	347.1372887	-1.325956586	0.133260665	-9.95009734	2.51937E-23	4.08636E-21	P4ha2
ENSMUSG000000028179	2624.488159	-0.755698734	0.076162286	-9.92217111	3.3327E-23	5.34984E-21	Cth
ENSMUSG000000024731	608.9764244	-0.974151646	0.098866289	-9.853232577	6.63801E-23	1.0547E-20	Msa4a10
ENSMUSG000000031957	160.0189137	-1.746452215	0.178500269	-9.784031267	1.31852E-22	2.05306E-20	Ctr1
ENSMUSG000000000184	8149.993752	-0.781886515	0.079931413	-9.781967907	1.34568E-22	2.07462E-20	Ccnd2
ENSMUSG000000056204	948.294065	-0.927818087	0.095500338	-9.715338212	2.59386E-22	3.92127E-20	Gpgep1
ENSMUSG00000001300	1018.428685	-0.926005425	0.09598988	-9.646906741	5.06608E-22	7.58499E-20	Efnb2
ENSMUSG000000029817	1172.052399	-0.805964594	0.084130154	-9.579972855	9.70704E-22	1.42593E-19	Tra2a
ENSMUSG000000032769	77.09118895	-2.256846556	0.237256788	-9.512252858	1.86577E-21	2.71514E-19	Tpaal1
ENSMUSG000000054999	303.9840631	-1.257228254	0.13245371	-9.491831154	2.27011E-21	3.27295E-19	Naalad1
ENSMUSG000000038745	4639.401959	-0.694254934	0.073458268	-9.451011537	3.35572E-21	4.75017E-19	Nlrp6
ENSMUSG000000021831	6538.428048	-1.40792366	0.149073209	-9.44451165	3.57065E-21	4.96417E-19	Ero1l
ENSMUSG000000020009	3040.607623	-0.780424978	0.082844346	-9.42037708	4.49471E-21	6.13922E-19	Ilfnr1
ENSMUSG000000053470	2669.876036	-0.925085912	0.098559816	-9.386035339	6.23013E-21	8.4356E-19	Kdm3a
ENSMUSG000000024924	1013.282716	-0.868697163	0.092726271	-9.368403992	7.36376E-21	9.88457E-19	Vldlr
ENSMUSG000000056216	1934.797641	-0.900188153	0.09705731	-9.274810467	1.77935E-20	2.32826E-18	Cebpg
ENSMUSG000000010755	1059.036178	-0.779292712	0.085065675	-9.161071264	5.13846E-20	6.50496E-18	Sars
ENSMUSG000000047963	227.8528824	-1.552624871	0.172811252	-8.984512614	2.59884E-19	3.21162E-17	Stbd1
ENSMUSG000000026678	38.75501034	-4.767073662	0.531583937	-8.967678159	3.0283E-19	3.71289E-17	Rgs5
ENSMUSG000000002565	462.1331011	-1.68080782	0.190485106	-8.823828064	1.10612E-18	1.3048E-16	Scin
ENSMUSG000000064213	6113.968584	-0.780704731	0.08999835	-8.674656003	4.14802E-18	4.78436E-16	Defa24
ENSMUSG000000037104	202.5840017	-1.495233379	0.172688582	-8.65955669	4.73602E-18	5.38282E-16	Socs5
ENSMUSG000000023030	9187.467102	-0.773110126	0.089472555	-8.64075168	5.58444E-18	6.30111E-16	Slc11a2
ENSMUSG000000030155	1113.100831	-1.479700873	0.171686507	-8.618620638	6.77655E-18	7.59119E-16	Clec2e
ENSMUSG000000074968	94.19890196	-10.27974047	1.193541271	-8.612806884	7.12931E-18	7.92932E-16	Ano3
ENSMUSG000000043192	10146.13264	-0.64734357	0.075663218	-8.555591362	1.17266E-17	1.29232E-15	Gm1840
ENSMUSG000000021133	1549.716658	-0.756769588	0.089102377	-8.49325923	2.00921E-17	2.1726E-15	Susd6
ENSMUSG000000063171	177.8712021	-2.145746941	0.252952691	-8.482799405	2.19839E-17	2.34541E-15	Rps4l
ENSMUSG000000030790	175.1619182	-1.414967784	0.167774837	-8.433730635	3.34817E-17	3.49895E-15	Adm
ENSMUSG000000022947	887.8206194	-0.980829722	0.117139736	-8.433730635	5.60935E-17	5.78432E-15	Cbr3



ENSMUSG00000033904	216.1422844	-1.484894013	0.178013464	-8.341470244	7.33725E-17	7.51634E-15	Ccp110
ENSMUSG00000038146	88.36375688	-1.820556324	0.221221756	1.87912E-16	1.88773E-14	Notch3	
ENSMUSG00000026628	226.7060032	-1.310160044	0.159604752	2.2345E-16	2.20212E-14	Atf3	
ENSMUSG00000094392	2257.160741	-0.663357322	0.081376164	3.58725E-16	3.46938E-14	Gm3788	
ENSMUSG00000004328	378.6511056	-1.148777857	0.141872731	5.62191E-16	5.37048E-14	Hif3a	
ENSMUSG000000031075	87.66635627	-1.890357827	0.233435758	5.58798E-16	5.37048E-14	Ano1	
ENSMUSG00000042985	465.9345674	-0.869367839	0.107397459	5.73283E-16	5.44304E-14	Upk3b	
ENSMUSG00000027955	30.5050249	-4.773268824	0.59042876	6.24653E-16	5.89483E-14	Fam198b	
ENSMUSG00000026317	372.0434754	-0.946190159	0.117127119	6.5666E-16	6.15955E-14	Cln8	
ENSMUSG00000027276	308.5325085	-1.010306705	0.125193174	7.03083E-16	6.55552E-14	Jag1	
ENSMUSG00000070661	1311.844029	-0.954497148	0.118313389	7.17329E-16	6.64853E-14	Rnf186	
ENSMUSG00000029335	625.6245141	-0.830135616	0.102913205	7.24213E-16	6.67261E-14	Bmp3	
ENSMUSG00000056749	216.3981508	-1.425247339	0.176764276	7.44549E-16	6.81963E-14	Nfil3	
ENSMUSG00000054612	140.3526915	-1.61464227	0.200617442	8.39078E-16	7.5961E-14	Mgmt	
ENSMUSG00000032374	192.5483222	-1.274363665	0.158614714	9.40882E-16	8.46848E-14	Plod2	
ENSMUSG00000036427	11365.88941	-0.634497254	0.079008853	9.69095E-16	8.67229E-14	Gpi1	
ENSMUSG00000039450	428.6353081	-1.05791023	0.132415672	1.35693E-15	1.2005E-13	Dcxr	
ENSMUSG00000040505	1288.008798	-0.728955076	0.091920024	2.18584E-15	1.91212E-13	Abcg5	
ENSMUSG0000001774	895.1213591	-1.030189833	0.130658678	3.15575E-15	2.7299E-13	Chordc1	
ENSMUSG00000025512	802.1037437	-0.751604311	0.09573253	4.12451E-15	3.52872E-13	Chid1	
ENSMUSG00000001441	2881.487706	-0.730724401	0.093191675	4.46649E-15	3.80042E-13	Npepps	
ENSMUSG00000025283	791.9487881	-0.772549449	0.09873224	5.08898E-15	4.30655E-13	Sat1	
ENSMUSG00000110631	746.954283	-1.137016367	0.145494695	5.50371E-15	4.63234E-13	Gm42047	
ENSMUSG00000053286	358.6881764	-0.902561171	0.116259477	8.27253E-15	6.88832E-13	Trmt1l	
ENSMUSG00000024587	7271.216466	-0.543345955	0.070282056	1.0676E-14	8.84235E-13	Nars	
ENSMUSG00000042684	568.0720769	-1.505329385	0.195397471	1.31939E-14	1.07561E-12	Npl	
ENSMUSG00000046733	235.8028172	-1.253143471	0.163560196	1.83537E-14	1.48847E-12	Gprc5a	
ENSMUSG00000028457	35.66604904	-3.055866333	0.400650779	2.39802E-14	1.93469E-12	At8b5	
ENSMUSG00000038079	1051.580546	-0.858569749	0.112603247	2.44539E-14	1.96274E-12	Tmem237	
ENSMUSG00000021668	214.4996177	-1.486213034	0.195490748	2.90526E-14	2.28474E-12	Polk	
ENSMUSG00000026726	58.18421502	-2.274695954	0.299277529	2.94706E-14	2.30597E-12	Cubn	
ENSMUSG00000055675	161.4097351	-1.279973773	0.168925655	3.53249E-14	2.73653E-12	Kbtbd11	
ENSMUSG00000040997	633.2336332	-0.766941874	0.101394116	3.90955E-14	2.9841E-12	Abhd4	
ENSMUSG00000014351	1344.149909	-0.81437572	0.107680169	3.94142E-14	2.99375E-12	Gip	
ENSMUSG00000019966	1155.22354	-1.117590063	0.147933935	4.19878E-14	3.17375E-12	Kitl	
ENSMUSG00000029752	3400.732773	-0.513805571	0.068018632	4.22432E-14	3.17763E-12	Asns	
ENSMUSG00000035969	150.4753046	-1.244795787	0.165372465	5.18299E-14	3.84307E-12	Rusc2	
ENSMUSG00000031523	87.89534883	-1.995340658	0.265541761	5.72489E-14	4.22475E-12	Dlc1	
ENSMUSG00000028278	2552.10709	-1.103334486	0.147775944	8.25026E-14	6.00303E-12	Ragd	
ENSMUSG00000031073	32.02679762	-3.559655624	0.47702166	8.50563E-14	6.13154E-12	Fgf15	
ENSMUSG00000023951	1991.060751	-0.73778891	0.098970885	9.01371E-14	6.43818E-12	Vegfa	
ENSMUSG00000051452	142.635304	-2.275212515	0.305292581	9.15434E-14	6.50878E-12	Gm11437	
ENSMUSG00000045664	180.9937126	-1.20211051	0.162371869	1.327E-13	9.22445E-12	Cdc42ep2	
ENSMUSG00000028811	1217.299726	-0.66714735	0.090168073	1.37285E-13	9.50074E-12	Yars	
ENSMUSG00000025408	330.6841454	-1.066783129	0.144386318	1.48612E-13	1.02391E-11	Idit3	
ENSMUSG00000020847	425.3944462	-0.87154604	0.118372778	1.80195E-13	1.23604E-11	Rph3al	
ENSMUSG00000020184	728.6165896	-0.817923184	0.111409866	2.11086E-13	1.44159E-11	Mdm2	
ENSMUSG00000051615	689.0905663	-0.740268015	0.10116338	2.5254E-13	1.7023E-11	Rap2a	
ENSMUSG00000025190	1339.327193	-0.692334963	0.094627124	2.5461E-13	1.70885E-11	Got1	
ENSMUSG00000027317	855.6662727	-0.699113292	0.09582764	2.97489E-13	1.97957E-11	Ppp1r14d	
ENSMUSG00000036377	668.5223516	-0.968550436	0.132802462	3.02754E-13	2.00604E-11	C530008M17Rik	
ENSMUSG00000056962	901.2323055	-0.7275231	0.099853414	3.19504E-13	2.10062E-11	Jmjd6	
ENSMUSG00000063011	169.8114471	-1.399185363	0.192289633	3.42726E-13	2.23288E-11	Msln	
ENSMUSG00000010185	117.305803	-1.528930863	0.210641795	3.9158E-13	2.52999E-11	Igfbp3	
ENSMUSG00000005803	1006.630906	-0.619984951	0.085849337	5.13118E-13	3.28796E-11	Sqor	
ENSMUSG00000005667	1435.785684	-0.866117984	0.120703181	7.19897E-13	4.57531E-11	Mthfd2	
ENSMUSG00000030088	834.4934029	-0.733728702	0.102485181	7.159363854	5.13035E-11	Aldh111	
ENSMUSG00000097310	174.1449416	-1.305578188	0.182447542	8.31197E-13	5.2399E-11	A930038B10Rik	
ENSMUSG00000041975	278.7125343	-0.886215389	0.124461862	1.07632E-12	6.70376E-11	Mettl8	
ENSMUSG00000030872	1376.666896	-0.644320751	0.090710239	1.2202E-12	7.5696E-11	Gga2	
ENSMUSG00000063229	24328.83018	-0.461273158	0.06495317	1.23297E-12	7.61848E-11	Ldha	
ENSMUSG00000074129	878.577459	-0.623946216	0.088467648	1.7533E-12	1.05408E-10	Rpl13a	
ENSMUSG00000046731	78.74120377	-1.700974704	0.241872867	2.02843E-12	1.21014E-10	Kcd11	
ENSMUSG00000019850	249.1009341	-1.072431139	0.152989837	2.38626E-12	1.40744E-10	Tnfrsf3	
ENSMUSG00000032715	686.9763855	-1.247223635	0.17845888	2.77134E-12	1.62228E-10	Trpb3	
ENSMUSG00000029167	238.5469818	-1.941583573	0.278417664	3.08852E-12	1.79445E-10	Ppargc1a	
ENSMUSG00000050711	343.3945023	-1.053420382	0.151259328	3.29962E-12	1.89588E-10	Scg2	
ENSMUSG00000029377	30.07388225	-3.137389088	0.451125811	3.53622E-12	2.02436E-10	Ereg	
ENSMUSG00000019210	1347.740988	-0.570500209	0.082288538	4.12229E-12	2.34263E-10	Atg6v1e1	
ENSMUSG00000063659	1767.960428	-0.5155989	0.074378699	4.14705E-12	2.34813E-10	Zbtb18	
ENSMUSG00000021336	700.0040301	-0.78688776	0.113648127	4.3939E-12	2.47889E-10	Slc17a4	
ENSMUSG00000042349	306.7340583	-0.841684983	0.121673048	4.59372E-12	2.57298E-10	Ikbke	
ENSMUSG00000090015	36.31835562	-3.304348554	0.477848002	4.67659E-12	2.61001E-10	Gm15446	
ENSMUSG00000046417	475.2536962	-0.753865844	0.109279174	5.25428E-12	2.89097E-10	Lrrc75a	
ENSMUSG00000075602	159.7557171	-1.310003456	0.190274661	5.78678E-12	3.17274E-10	Ly6a	
ENSMUSG00000047123	676.0854851	-0.685470265	0.100351109	6.44899E-12	4.55222E-10	Ticam1	
ENSMUSG00000022462	3015.79841	-0.515871901	0.075809346	1.01148E-11	5.41231E-10	Slc38a2	
ENSMUSG00000030934	31941.75973	-0.527893025	0.07774679	1.1221E-11	5.98366E-10	Oat	
ENSMUSG00000000552	149.7302111	-1.176102058	0.173266845	1.1385E-11	6.05038E-10	Zfp385a	
ENSMUSG00000068874	981.5180038	-0.673473674	0.09927648	1.1704E-11	6.17825E-10	Selenbp1	
ENSMUSG00000030609	671.2210295	-0.883864947	0.130388556	1.21262E-11	6.37894E-10	Aen	
ENSMUSG00000040738	661.7886448	-0.741814958	0.10944745	1.22004E-11	6.39637E-10	Ints8	
ENSMUSG00000020823	686.2715904	-0.634406408	0.094043317	1.52086E-11	7.92016E-10	Sec14l1	
ENSMUSG00000020105	428.5778696	-0.806118626	0.119617737	1.59346E-11	8.25214E-10	Lrig3	
ENSMUSG00000003873	653.7592679	-1.157729909	0.171911217	1.64535E-11	8.45538E-10	Bax	
ENSMUSG00000005355	22.61383316	-5.333466685	0.792222136	1.67017E-11	8.55467E-10	Casp14	
ENSMUSG00000105452	703.8309173	-0.721655762	0.107216403	1.68694E-11	8.61224E-10	Gm5276	
ENSMUSG00000020303	1504.079313	-1.140415886	0.169497181	1.7174E-11	8.73911E-10	Stc2	
ENSMUSG00000021754	806.7733111	-0.615783874	0.091547555	1.73933E-11	8.82186E-10	Map3k1	
ENSMUSG00000024131	1313.911503	-0.803600663	0.119574117	1.86778E-11	9.44258E-10	Slc3a1	
ENSMUSG00000053964	17213.27103	-0.57558359	0.085872713	2.04529E-11	1.02733E-09	Lgals4	
ENSMUSG00000004451	1318.443022	-0.576968174	0.086219773	2.20395E-11	1.10346E-09	Ralb	

ENSMUSG00000022074	215.1928404	-1.00154834	0.149752388	-6.688029171	2.26196E-11	1.12888E-09	Tnfrsf10b
ENSMUSG00000039782	409.5150835	-0.73694001	0.110227076	-6.678700878	2.29897E-11	1.14004E-09	Cpeb2
ENSMUSG00000032231	4548.256281	-0.584391627	0.087500794	-6.678700878	2.4107E-11	1.18413E-09	Anxa2
ENSMUSG00000045316	660.0886221	-0.707745431	0.106225298	-6.6626825	2.68874E-11	1.30425E-09	Fahad1
ENSMUSG00000056708	973.6715985	-0.803786457	0.120657316	-6.661729948	2.70623E-11	1.30866E-09	Ier5
ENSMUSG00000100801	1439.709598	-0.541362373	0.081702123	-6.626050298	3.44788E-11	1.64684E-09	Gm15459
ENSMUSG00000091387	1207.316789	-0.748417918	0.113294154	-6.605971187	3.9492E-11	1.88052E-09	Gcnt4
ENSMUSG00000073987	1742.841159	-0.832773054	0.12670687	-6.572438045	4.9498E-11	2.32149E-09	Ggh
ENSMUSG00000030641	421.8105146	-1.063194151	0.161902165	-6.566892722	5.1376E-11	2.38799E-09	Ddias
ENSMUSG00000045725	535.1349713	-0.799517141	0.121903741	-6.558593946	5.43175E-11	2.50973E-09	Prr15
ENSMUSG00000041974	430.5115375	-0.817650522	0.124727876	-6.555475382	5.54649E-11	2.54762E-09	Spidr
ENSMUSG00000097615	297.4200074	-1.315689197	0.201248995	-6.537618704	6.2506E-11	2.84585E-09	Gm2061
ENSMUSG00000006494	4762.417003	-0.556466852	0.085427697	-6.513892691	7.32278E-11	3.30502E-09	Pdk1
ENSMUSG00000027309	577.1932828	-0.747154359	0.114870088	-6.504342204	7.80341E-11	3.51176E-09	4930402H24Rik
ENSMUSG00000040918	1227.00282	-0.531906092	0.081885051	-6.49576554	8.26122E-11	3.70708E-09	Slc19a2
ENSMUSG00000025025	918.451699	-0.58162014	0.089821524	-6.47528692	9.46319E-11	4.23424E-09	Pgm2
ENSMUSG00000034485	2129.51139	-0.586148363	0.090668552	-6.464737259	1.01475E-10	4.51448E-09	Uaca
ENSMUSG00000056999	2583.135643	-0.543342395	0.084455166	-6.433500987	1.24698E-10	5.51611E-09	Ide
ENSMUSG00000006642	690.8869338	-0.685099249	0.106564068	-6.428989245	1.28455E-10	5.66622E-09	Tcf23
ENSMUSG00000011752	347.7662529	-0.912314938	0.14222431	-6.414620254	1.41174E-10	6.19218E-09	Pgam1
ENSMUSG00000006445	465.3041666	-0.9603909	0.149828143	-6.409949966	1.45567E-10	6.36694E-09	Epha2
ENSMUSG00000034449	1126.389688	-0.556627289	0.086889585	-6.40614508	1.49245E-10	6.5095E-09	Dhrs11
ENSMUSG00000023259	555.7070858	-0.812687071	0.127073811	-6.395393857	1.60134E-10	6.96494E-09	Slc26a6
ENSMUSG00000022051	1151.234982	-0.69596596	0.108982268	-6.386047654	1.70228E-10	7.36283E-09	Bnip3l
ENSMUSG00000025791	2820.529414	-0.535819698	0.084066698	-6.37374505	1.84467E-10	7.95661E-09	Pgm2
ENSMUSG00000046351	539.0899199	-1.07291461	0.168418853	-6.370513713	1.88396E-10	8.08131E-09	Zfp322a
ENSMUSG00000100865	844.0862614	-0.638155769	0.100532964	-6.347726608	2.1852E-10	9.22107E-09	Gm39320
ENSMUSG00000031987	1856.691249	-0.688358673	0.108566287	-6.340445947	2.29101E-10	9.5896E-09	Egln1
ENSMUSG00000051483	3381.254534	-0.475869362	0.075049943	-6.340705008	2.28716E-10	9.5896E-09	Cbr1
ENSMUSG00000059895	224.1642895	-1.137301175	0.179860912	-6.323224843	2.5616E-10	1.06365E-08	Ptp4a3
ENSMUSG00000028645	1616.675146	-0.851184288	0.134679737	-6.320062021	2.61458E-10	1.07989E-08	Slc2a1
ENSMUSG00000094091	97.7106925	-1.475376813	0.233438675	-6.320190156	2.61242E-10	1.07989E-08	Gm21885
ENSMUSG00000022742	3905.036169	-0.469741948	0.074601885	-6.29664985	3.04147E-10	1.24957E-08	Cpx
ENSMUSG00000046668	279.7998587	-0.957674534	0.152779908	-6.268327728	3.64946E-10	1.4837E-08	Cxxc5
ENSMUSG00000008859	1200.013415	-0.586730005	0.093719431	-6.260494757	3.83758E-10	1.55612E-08	Rala
ENSMUSG00000040446	159.3288285	-1.003855043	0.160427777	-6.257364288	3.91538E-10	1.58354E-08	Prrd1a
ENSMUSG00000021194	1188.538035	-0.852202614	0.136221675	-6.255998622	3.9498E-10	1.59333E-08	Chga
ENSMUSG00000027329	315.1068889	-0.897553455	0.143747315	-6.243966746	4.26611E-10	1.71647E-08	Spef1
ENSMUSG00000030930	174.8233276	-0.922361289	0.147761372	-6.242235552	4.31361E-10	1.73111E-08	Chst15
ENSMUSG00000029135	1593.78396	-0.528511637	0.084846045	-6.22906623	4.69223E-10	1.87822E-08	Fosl2
ENSMUSG00000024143	408.779858	-0.703000403	0.11295036	-6.223976654	4.84709E-10	1.93523E-08	Rhoq
ENSMUSG00000034634	26.21028661	-2.602357137	0.418592325	-6.216925112	5.06992E-10	2.01387E-08	Ly6d
ENSMUSG00000031700	466.4892031	-0.661224915	0.106401609	-6.214425924	5.15126E-10	2.03579E-08	Gpt2
ENSMUSG00000072568	2536.596844	-0.61106188	0.098326991	-6.21458947	5.1459E-10	2.03579E-08	Fam84b
ENSMUSG00000070390	29.60494288	-7.614754269	1.229199323	-6.194889735	5.83258E-10	2.29922E-08	Nlrp1b
ENSMUSG00000028337	1955.231303	-0.500601874	0.080825105	-6.193643354	5.87892E-10	2.30581E-08	Coro2a
ENSMUSG00000084349	3398.78565	-0.425076811	0.068691475	-6.188203275	6.08538E-10	2.36889E-08	Rpl3-ps1
ENSMUSG00000099032	243.598701	-1.083947737	0.175372141	-6.180843399	6.376E-10	2.47583E-08	Tcf24
ENSMUSG00000029994	13068.78616	-0.421004415	0.068171668	-6.175650762	6.58915E-10	2.5459E-08	Anxa4
ENSMUSG00000030168	5593.142594	-0.706747764	0.11449663	-6.172651218	6.71542E-10	2.58826E-08	Adipor2
ENSMUSG00000090704	16.91275297	-7.865278063	1.274560697	-6.170971754	6.78715E-10	2.60302E-08	Trp53-ps
ENSMUSG00000062300	1827.10841	-0.534985179	0.087075671	-6.143911052	8.05139E-10	3.05776E-08	Nectin2
ENSMUSG00000050866	1192.587808	-0.617783565	0.100748685	-6.131926845	8.6821E-10	3.26544E-08	Clnr3
ENSMUSG00000072704	1407.944956	-0.681794645	0.111527462	-6.113244537	9.76256E-10	3.64539E-08	Smm10l1
ENSMUSG00000031557	1128.011389	-0.832412314	0.136472907	-6.099469343	1.06421E-09	3.95485E-08	Plekha2
ENSMUSG00000085890	25.72467729	-2.755316293	0.451817361	-6.098296631	1.07205E-09	3.97449E-08	Tnfrsf13os
ENSMUSG00000029221	1040.016196	-0.574085115	0.094447147	-6.078374362	1.21407E-09	4.49033E-08	Slc30a9
ENSMUSG00000032076	274.8432434	-0.788714711	0.129811143	-6.075862908	1.23323E-09	4.55038E-08	Cadm1
ENSMUSG00000022884	2479.025323	-0.81783414	0.134783646	-6.067754995	1.29711E-09	4.77476E-08	Eif4a2
ENSMUSG00000030494	2147.35748	-0.526782605	0.086868649	-6.064128011	1.32671E-09	4.87223E-08	Rhpn2
ENSMUSG00000106990	54.35587574	-1.628049889	0.268922344	-6.05397776	1.41312E-09	5.15309E-08	Gm42547
ENSMUSG00000038302	269.5927379	-0.880024149	0.14564011	-6.042457329	1.51784E-09	5.50918E-08	Afgl1
ENSMUSG00000058594	1040.440593	-0.521715075	0.086477121	-6.032983861	1.60959E-09	5.81508E-08	Fbxo18
ENSMUSG00000020080	1480.399625	-0.550586583	0.091294495	-6.030884783	1.63064E-09	5.87749E-08	Hkdc1
ENSMUSG00000005413	165.4329089	-0.919251593	0.15273214	-6.018717431	1.75804E-09	6.32206E-08	Hmox1
ENSMUSG00000075585	410.8887951	-0.712618296	0.11843399	-6.017008262	1.7767E-09	6.37018E-08	6330403L08Rik
ENSMUSG00000108314	225.8775523	-0.818943418	0.136110742	-6.01674346	1.77961E-09	6.37018E-08	Prkc22
ENSMUSG00000037855	23.92453017	-6.44665665	1.072014679	-6.013589901	1.81459E-09	6.48051E-08	Zfp365
ENSMUSG00000024817	793.7258285	-0.548879956	0.091279892	-6.013153018	1.81949E-09	6.48314E-08	Uhrf2
ENSMUSG00000041737	2557.295591	-0.479235603	0.079804039	-6.005154702	1.9115E-09	6.79541E-08	Tmem45b
ENSMUSG00000026447	710.9102025	-0.578884814	0.096470425	-6.000645406	1.96535E-09	6.9551E-08	Pik3c2b
ENSMUSG00000038235	1892.639506	-0.480548295	0.080224123	-5.990072239	2.09748E-09	7.37242E-08	F11r
ENSMUSG00000099876	14.27349357	-7.619557481	1.272876371	-5.986093901	2.1494E-09	7.50412E-08	Gm29650
ENSMUSG00000039831	278.9205043	-0.855522929	0.143158439	-5.976056576	2.28604E-09	7.94551E-08	Arhgap29
ENSMUSG00000020132	1215.039612	-0.51755418	0.086695072	-5.96982235	2.37512E-09	8.23675E-08	Rab21
ENSMUSG00000036880	2877.975259	-0.425982312	0.071400247	-5.966118172	2.42964E-09	8.40711E-08	Erc5
ENSMUSG00000026048	335.232671	-0.765198354	0.128347927	-5.961906588	2.49312E-09	8.56961E-08	Acad2
ENSMUSG00000026932	682.9290562	-0.571261543	0.095882172	-5.957953746	2.55416E-09	8.74083E-08	Nacc2
ENSMUSG00000026614	631.973703	-0.798502124	0.134161032	-5.951818601	2.65179E-09	9.01551E-08	Slc30a10
ENSMUSG00000030364	251.9955969	-1.558892084	0.261971196	-5.950623993	2.67122E-09	9.06178E-08	Clec2h
ENSMUSG00000074093	946.3778765	-0.834236204	0.140303569	-5.945937168	2.7488E-09	9.30467E-08	Svip
ENSMUSG00000020605	417.6798576	-0.659307289	0.111050973	-5.936545943	2.91089E-09	9.81072E-08	Hs1bp3
ENSMUSG00000073802	171.7334557	-0.993148029	0.167601121	-5.925664598	3.11037E-09	1.0393E-07	Bcgn2b
ENSMUSG00000074825	798.7336673	-0.60321106	0.10199806	-5.913845149	3.34212E-09	1.1096E-07	Itpr1p1
ENSMUSG00000059883	437.236687	-0.652065882	0.110539703	-5.89892922	3.65868E-09	1.21211E-07	Irak4
ENSMUSG00000020883	80.07583272	-1.816307962	0.3079657	-5.897760563	3.68468E-09	1.21814E-07	Bbc3
ENSMUSG00000027984	7317.622261	-0.38488477	0.06529562	-5.89449602	3.75827E-09	1.23983E-07	Hadh
ENSMUSG00000032358	1019.987234	-0.725657272	0.123283089	-5.88610552	3.95402E-09	1.2989E-07	Fam83b
ENSMUSG00000047728	207.7816255	-1.114310008	0.189548646	-5.878754791	4.13364E-09	1.3522E-07	BC025446
ENSMUSG00000062373	1346.488543	-0.723238513	0.123478692	-5.857192853	4.70756E-09	1.52078E-07	Tmem65
ENSMUSG00000027695	1834.942607	-0.64750824	0.110617645	-5.853571001	4.81129E-09	1.54786E-07	Pld1
ENSMUSG00000056671	641.2527931	-0.877204343	0.150054529	-5.835710018	5.03825E-09	1.60431E-07	Prelid2

ENSMUSG00000003865	952.7288922	-0.685439737	0.117497083	-5.83367452	5.42198E-09	1.71946E-07	Gys1
ENSMUSG00000015656	4823.696117	-0.57024729	0.097847021	-5.61133E-09	5.61133E-09	1.76969E-07	Hspa8
ENSMUSG00000026077	394.2019693	-0.811433269	0.139276892	-5.826043758	5.67567E-09	1.78177E-07	Npas2
ENSMUSG00000022965	1586.005415	-0.511425429	0.08805114	-5.808277184	6.3119E-09	1.97354E-07	Ifngr2
ENSMUSG00000028982	209.5569466	-0.824774671	0.141993958	-5.808519486	6.30277E-09	1.97354E-07	Slc25a33
ENSMUSG00000072946	1664.517891	-0.741203849	0.127915404	-5.794484668	6.85313E-09	2.1257E-07	Ptgr2
ENSMUSG00000020277	5047.375787	-0.654846823	0.113108966	-5.789521811	7.05871E-09	2.18511E-07	Pfkl
ENSMUSG00000018415	960.7538167	-0.558332082	0.096488472	-5.786515976	7.18613E-09	2.22014E-07	Gid4
ENSMUSG00000019179	12413.98519	-0.365555093	0.063226118	-5.781710232	7.3945E-09	2.27549E-07	Mdh2
ENSMUSG00000030846	1051.213179	-0.535633221	0.092743498	-5.775426114	7.67586E-09	2.35277E-07	Tial1
ENSMUSG00000033429	446.4103166	-0.617801354	0.107000411	-5.773822256	7.74932E-09	2.37062E-07	Mcee
ENSMUSG00000037685	718.7968967	-0.663925199	0.115034284	-5.771541962	7.85494E-09	2.39353E-07	Atp8a1
ENSMUSG00000057836	20.29367858	-7.140712362	1.237186537	-5.771734617	7.84596E-09	2.39353E-07	Xlr3a
ENSMUSG00000026831	15.36345017	-3.727527893	0.648537822	-5.74758752	9.05257E-09	2.72645E-07	1700007K13Rik
ENSMUSG00000052137	117.1620469	-1.24451515	0.216896225	-5.737836849	9.58934E-09	2.86594E-07	Rbm12b2
ENSMUSG00000006800	1786.133485	-0.457505074	0.079849443	-5.729596289	1.0067E-08	2.98577E-07	Sulf2
ENSMUSG00000038648	344.3281032	-0.715202049	0.125060251	-5.718859845	1.07241E-08	3.1686E-07	Creb3l2
ENSMUSG00000039976	2164.351822	-0.507502382	0.088872348	-5.710464451	1.12668E-08	3.31637E-07	Tbc1d16
ENSMUSG00000079523	1157.989821	-0.752464137	0.131879544	-5.705692592	1.15871E-08	3.4042E-07	Tmsb10
ENSMUSG00000026617	4919.215097	-0.566877655	0.099386264	-5.703782724	1.17177E-08	3.4361E-07	Bpnt1
ENSMUSG00000021666	877.1306378	-0.594539386	0.104326227	-5.698848722	1.20619E-08	3.52634E-07	Gfm2
ENSMUSG00000021932	47.11984157	-1.826329902	0.320480522	-5.698723554	1.20708E-08	3.52634E-07	Rtnaseh2b
ENSMUSG00000055730	7165.458749	-0.544645699	0.095679802	-5.692379012	1.25281E-08	3.64627E-07	Ces2a
ENSMUSG00000063856	2156.873016	-0.482292365	0.084764536	-5.68978946	1.27196E-08	3.69509E-07	Gpx1
ENSMUSG00000053898	2251.629218	-0.412662991	0.072566317	-5.686701589	1.29516E-08	3.7555E-07	Ech1
ENSMUSG00000022265	1902.938177	-0.440981573	0.077575041	-5.684580584	1.31134E-08	3.79533E-07	Ank
ENSMUSG00000003051	3250.067091	-0.523653082	0.092151853	-5.682501946	1.32738E-08	3.83464E-07	Elf3
ENSMUSG00000029314	280.5391698	-0.809878706	0.142721482	-5.674539641	1.39062E-08	4.00247E-07	Gpat3
ENSMUSG00000037012	718.9099275	-0.596299248	0.105368796	-5.659163556	1.52113E-08	4.33799E-07	Hk1
ENSMUSG00000024503	175.3552044	-0.945031567	0.167036362	-5.65763978	1.53469E-08	4.36867E-07	Spink1
ENSMUSG00000040254	44.8116661	-1.592982749	0.281860606	-5.651668635	1.58898E-08	4.51183E-07	Sema3d
ENSMUSG00000019998	1393.333945	-0.596726409	0.105607425	-5.650420948	1.60055E-08	4.53131E-07	Stx7
ENSMUSG00000020098	1279.16404	-0.496837685	0.088105217	-5.63914035	1.70901E-08	4.82959E-07	Pcbd1
ENSMUSG00000051727	1909.38265	-0.639953746	0.113567707	-5.634997529	1.75061E-08	4.93817E-07	Kctd14
ENSMUSG00000028039	345.2040386	-0.856989579	0.152123489	-5.633512525	1.76576E-08	4.9719E-07	Efn3a
ENSMUSG00000052105	66.43415174	-1.423022455	0.253170254	-5.620812203	1.90062E-08	5.33235E-07	Mtd1
ENSMUSG00000020309	242.4241506	-0.832512193	0.148335571	-5.612357103	1.99589E-08	5.56954E-07	Chac2
ENSMUSG00000000168	2093.348406	-0.488572365	0.08712763	-5.607547965	2.05213E-08	5.71623E-07	Dlat
ENSMUSG00000026880	648.6322815	-0.78302564	0.139731026	-5.603806561	2.09695E-08	5.83064E-07	Stom
ENSMUSG00000026303	604.865629	-0.580461964	0.103703146	-5.597341913	2.17663E-08	6.04141E-07	Mrph
ENSMUSG00000031374	51.19084105	-1.59260607	0.28528299	-5.582548298	2.3702E-08	6.54368E-07	Zfp92
ENSMUSG00000002580	714.2200235	-0.54600669	0.098065415	-5.567780361	2.58005E-08	7.11043E-07	Mien1
ENSMUSG00000053768	2720.005353	-0.417093258	0.074963094	-5.563981391	2.63688E-08	7.25422E-07	Chchd3
ENSMUSG00000026670	1089.114931	-0.504922089	0.090904519	-5.554422343	2.78531E-08	7.63558E-07	Uap1
ENSMUSG00000021360	346.1417354	-0.854298176	0.154434078	-5.53179834	3.16964E-08	8.64352E-07	Gcnt2
ENSMUSG00000040258	34.97533092	-2.249565591	0.406918012	-5.528301833	3.23345E-08	8.80212E-07	Nxph4
ENSMUSG00000020681	485.5747893	-0.962090742	0.174150337	-5.524483938	3.30455E-08	8.94873E-07	Ace
ENSMUSG00000036339	430.9461596	-0.60165846	0.109010056	-5.519293173	3.40366E-08	9.18516E-07	Tmem260
ENSMUSG00000032883	2257.529726	-0.590948771	0.107141824	-5.515575051	3.47641E-08	9.34909E-07	Acsf3
ENSMUSG00000047446	550.445351	-1.044805218	0.18960952	-5.510299373	3.58224E-08	9.61708E-07	Arl4a
ENSMUSG00000026094	1239.617225	-0.803922967	0.146076206	-5.503449129	3.72432E-08	9.93003E-07	Stk17b
ENSMUSG00000082361	734.686721	-0.768084974	0.13963862	-5.50051964	3.78674E-08	1.00792E-06	Btc
ENSMUSG00000075122	10.25220464	-7.054030686	1.28451615	-5.491585828	3.98341E-08	1.05665E-06	Cd80
ENSMUSG000000004771	1432.493583	-0.531434007	0.096878215	-5.485588339	4.12096E-08	1.08616E-06	Rab11a
ENSMUSG00000026103	6621.438671	-0.84837597	0.154747787	-5.482314073	4.19798E-08	1.10417E-06	Gls
ENSMUSG00000037366	1197.649052	-0.513471062	0.093699357	-5.479984902	4.25362E-08	1.11692E-06	Pafah2
ENSMUSG00000020846	1891.936776	-0.515018828	0.094045693	-5.476261728	4.34405E-08	1.13492E-06	Rflnb
ENSMUSG00000026024	1007.747544	-0.580546289	0.106027708	-5.475420541	4.36474E-08	1.13841E-06	Als2
ENSMUSG00000028419	1137.426348	-0.544299281	0.099687285	-5.460067236	4.75954E-08	1.227E-06	Chmp5
ENSMUSG00000034781	4567.422559	-0.399939436	0.073243684	-5.460394895	4.75077E-08	1.227E-06	Gna11
ENSMUSG00000021759	506.1861636	-0.615759882	0.112904723	-5.453800937	4.93044E-08	1.26896E-06	Plpp1
ENSMUSG00000106917	1684.612357	-0.471268579	0.0864705	-5.450050358	5.03556E-08	1.29387E-06	Gm7832
ENSMUSG00000040498	2808.977806	-0.400499612	0.073814776	-5.425737687	5.77157E-08	1.47117E-06	Igsf23
ENSMUSG00000033475	295.2639859	-0.811869831	0.149690058	-5.423672365	5.83869E-08	1.48069E-06	Igsf9b
ENSMUSG00000072949	1251.97624	-0.536563509	0.098924341	-5.423978586	5.82869E-08	1.48069E-06	Acof1
ENSMUSG00000063882	3183.838774	-0.469137276	0.086527633	-5.421820303	5.89952E-08	1.49368E-06	Uqcrh
ENSMUSG00000001288	112.1279473	-0.993072346	0.183230253	-5.419805582	5.96639E-08	1.50429E-06	Rarg
ENSMUSG00000022105	697.4443943	-1.190624686	0.21968519	-5.419685703	5.97039E-08	1.50429E-06	Rb1
ENSMUSG00000084235	488.9955914	-0.875586734	0.161690995	-5.415185507	6.12252E-08	1.54013E-06	Gm15421
ENSMUSG000000109836	191.8718443	-1.381490677	0.255492437	-5.407168588	6.40289E-08	1.60805E-06	Gm45884
ENSMUSG00000022474	501.2121913	-0.553361264	0.102545908	-5.396229604	6.80558E-08	1.69823E-06	Pmm1
ENSMUSG00000041966	1154.791486	-0.733077467	0.135868218	-5.395503674	6.83316E-08	1.70239E-06	Dcaf17
ENSMUSG00000024644	1224.348713	-0.542173564	0.100515209	-5.393945557	6.89271E-08	1.71448E-06	Cndp2
ENSMUSG00000026107	472.5899602	-0.99209189	0.184080559	-5.38944413	7.06759E-08	1.75518E-06	Nabp1
ENSMUSG00000035948	104.4325852	-1.037666072	0.192733008	-5.383956204	7.28662E-08	1.79888E-06	Acsc3
ENSMUSG00000060206	367.5461329	-0.806245501	0.149781812	-5.382799773	7.33361E-08	1.80683E-06	Zfp462
ENSMUSG00000034157	642.202374	-0.548813143	0.101998149	-5.380618662	7.42303E-08	1.82111E-06	Cipc
ENSMUSG00000068566	2723.518065	-0.411813022	0.076537623	-5.380530567	7.42666E-08	1.82111E-06	Myadm
ENSMUSG00000018909	2142.010504	-0.598237591	0.111246069	-5.377606553	7.54825E-08	1.84222E-06	Arb1
ENSMUSG00000046687	176.7680016	-0.893039405	0.166325086	-5.369240599	7.90689E-08	1.92432E-06	Gm5424
ENSMUSG00000086583	1754.035762	-0.672043502	0.125166765	-5.369184876	7.90933E-08	1.92432E-06	Gm15500
ENSMUSG00000043889	364.0169979	-0.682751379	0.127235186	-5.366057928	8.04761E-08	1.94882E-06	Gm8399
ENSMUSG00000024097	1896.747779	-0.431888057	0.080563049	-5.360870323	8.2822E-08	1.99941E-06	Srsf7
ENSMUSG00000051154	772.0960725	-0.534501015	0.09972748	-5.359616175	8.33989E-08	2.01022E-06	Commf3
ENSMUSG00000034610	283.0959436	-0.924896713	0.172984027	-5.346717448	8.95637E-08	2.14884E-06	Zcchc11
ENSMUSG00000009633	93.31531577	-1.298649037	0.242907584	-5.346267975	8.97862E-08	2.15086E-06	G0s2
ENSMUSG00000036503	1400.59077	-0.729723768	0.136800614	-5.334214132	9.59592E-08	2.28818E-06	Rnf13
ENSMUSG00000002731	607.4300564	-0.536604136	0.100619624	-5.332996812	9.6605E-08	2.30006E-06	Prkra
ENSMUSG00000060680	268.53111476	-0.761914539	0.143086187	-5.324864384	1.01028E-07	2.39439E-06	Gm8894
ENSMUSG00000022108	4274.74066	-0.35312674	0.066380525	-5.319734055	1.03919E-07	2.45915E-06	Itm2b
ENSMUSG00000028607	1131.057638	-0.493189698	0.09285198	-5.311569018	1.08685E-07	2.56027E-06	Cpt2
ENSMUSG00000058761	421.8944455	-0.718103651	0.135378938	-5.304438	1.13046E-07	2.65496E-06	Rnf169



ENSMUSG00000029777	3983.742253	-0.391244387	0.07384066	-5.298495296	1.16761E-07	2.73396E-06	Gars
ENSMUSG00000040048	1413.294096	-0.433859123	0.081938179	-5.281766073	1.19045E-07	2.78325E-06	Ndufb10
ENSMUSG00000026078	736.7270124	-0.51305886	0.097137748	-5.270436839	1.27944E-07	2.98684E-06	Pdcd3
ENSMUSG00000023169	8686.461963	-0.42693431	0.081005488	-5.258879872	1.36099E-07	3.16299E-06	Slc38a1
ENSMUSG00000019797	413.0026781	-0.631135816	0.120013355	-5.251824633	1.44936E-07	3.34835E-06	1700021F05Rik
ENSMUSG00000014177	847.2525028	-0.641683441	0.122182953	-5.250912573	1.506E-07	3.46892E-06	Tvp23b
ENSMUSG00000038418	529.2441973	-0.561644639	0.106961339	-5.244844365	1.51348E-07	3.48099E-06	Egr1
ENSMUSG00000034159	100.2842361	-1.013701362	0.193244839	-5.243793374	1.55704E-07	3.57063E-06	2310007B03Rik
ENSMUSG00000065979	1783.939895	-0.391550169	0.074654297	-5.238310785	1.56414E-07	3.58166E-06	Cpped1
ENSMUSG00000006936	56.37606083	-1.336695556	0.254910036	-5.238310785	1.57308E-07	3.59684E-06	Crip2
ENSMUSG00000027997	768.1455675	-0.493134796	0.094140042	-5.238310785	1.62053E-07	3.68908E-06	Casp6
ENSMUSG00000041782	5411.191798	-0.381357733	0.072800841	-5.238310785	1.62001E-07	3.68908E-06	Lad1
ENSMUSG00000071551	1702.688069	-0.594212598	0.11348937	-5.238310785	1.62433E-07	3.73324E-06	Akr1c19
ENSMUSG00000062908	1359.782418	-0.425207005	0.081490007	-5.222426275	1.75957E-07	3.9823E-06	Acadm
ENSMUSG00000048756	1319.190281	-0.44296828	0.084820399	-5.222426275	1.76594E-07	3.99092E-06	Foxo3
ENSMUSG000000085042	517.294425	-0.528341405	0.101254996	-5.217929248	1.80935E-07	4.07718E-06	Abhd11os
ENSMUSG00000100863	1114.366093	-0.501585902	0.096353727	-5.200498817	1.93296E-07	4.34316E-06	Gm12669
ENSMUSG00000000958	771.2135193	-0.464344908	0.089288533	-5.193478062	1.98754E-07	4.44656E-06	Slc7a7
ENSMUSG000000069833	827.7511697	-1.014986281	0.195434787	-5.19066887	2.06401E-07	4.59782E-06	Ahnak
ENSMUSG00000030587	367.9056049	-0.607656371	0.117067065	-5.188920682	2.0954E-07	4.66107E-06	220002D01Rik
ENSMUSG00000040703	1895.493792	-0.392976924	0.075733847	-5.188920682	2.11516E-07	4.69163E-06	Cyp2s1
ENSMUSG00000047153	476.1397039	-0.5516302	0.106308975	-5.188920682	2.11502E-07	4.69163E-06	Khryn
ENSMUSG00000030157	443.2607698	-0.717979964	0.138452848	-5.180136958	2.15163E-07	4.75895E-06	Clec2d
ENSMUSG00000037995	971.4867293	-0.636680277	0.122908001	-5.179029725	2.21723E-07	4.89709E-06	Igfs9
ENSMUSG00000008226	302.8678428	-0.713194722	0.137708173	-5.172664907	2.23043E-07	4.91927E-06	Scrn3
ENSMUSG00000021215	4601.437766	-0.533431247	0.103125035	-5.170002502	2.30779E-07	5.08268E-06	Net1
ENSMUSG00000030769	56.06126799	-1.676140821	0.324205031	-5.154416819	2.34091E-07	5.14224E-06	Slc5a11
ENSMUSG00000031584	3515.764036	-0.383682572	0.074330368	-5.140415131	2.44515E-07	5.34739E-06	Gsr
ENSMUSG00000031608	3091.180949	-0.720988882	0.13979628	-5.133047689	2.50273E-07	5.45798E-06	Gaint7
ENSMUSG00000045975	317.3183121	-0.658183439	0.127631595	-5.125174334	2.51071E-07	5.46773E-06	C2cd2
ENSMUSG00000021771	4466.378872	-0.415637227	0.0806371	-5.120254991	2.54421E-07	5.53296E-06	Vdac2
ENSMUSG00000031767	311.9266872	-0.861041002	0.167504176	-5.1147219	2.74132E-07	5.92027E-06	Nudt7
ENSMUSG00000001025	382.1110107	-0.608164303	0.118480158	-5.106288048	2.85088E-07	6.13983E-06	Sl100a6
ENSMUSG00000035126	30.6362033	-1.7863574	0.348545685	-5.104547274	2.97263E-07	6.3932E-06	Wdr78
ENSMUSG00000022094	5775.772726	-0.369742009	0.07221164	-5.103296395	3.05123E-07	6.5532E-06	Slc39a14
ENSMUSG00000042429	1073.328596	-0.457120362	0.08931762	-5.106288048	3.08925E-07	6.6166E-06	Adora1
ENSMUSG00000032038	2586.199895	-0.896089733	0.175198134	-5.09671465	3.14204E-07	6.7112E-06	St3gal4
ENSMUSG00000060373	3083.055868	-0.393183434	0.07689144	-5.083771249	3.16264E-07	6.74596E-06	Hnmpc
ENSMUSG00000067005	462.5650057	-0.546771403	0.107078057	-5.082325759	3.28549E-07	6.97931E-06	Pknox1
ENSMUSG00000068739	3696.860065	-0.46124796	0.090360209	-5.082325759	3.31587E-07	7.03426E-06	Sars
ENSMUSG00000069682	2313.708355	-0.39095934	0.076609178	-5.075274952	3.33788E-07	7.0713E-06	Gm10275
ENSMUSG000000087107	9.464167714	-6.910207005	1.355815948	-5.075274952	3.45599E-07	7.29176E-06	Al662270
ENSMUSG00000091412	126.766693	-0.938587911	0.18462434	-5.075274952	3.70014E-07	7.75435E-06	Gm2895
ENSMUSG00000039221	979.9501546	-0.687952636	0.135361775	-5.075274952	3.72841E-07	7.80311E-06	Rpl22l1
ENSMUSG00000034487	234.5616153	-0.703645319	0.138472963	-5.075274952	3.74538E-07	7.82809E-06	Kdelc2
ENSMUSG00000028292	680.0625806	-0.656494241	0.129340096	-5.075274952	3.86029E-07	8.03591E-06	Rars2
ENSMUSG00000040128	695.3580565	-0.61782718	0.121732751	-5.075274952	3.86936E-07	8.04403E-06	Pncr1
ENSMUSG00000044641	1174.003467	-0.43814968	0.086392052	-5.075274952	3.94395E-07	8.18816E-06	Par6b
ENSMUSG00000018574	2118.411045	-0.363757951	0.071845805	-5.063036745	4.1263E-07	8.54397E-06	Acadvl
ENSMUSG00000019890	86.30092592	-1.2684542	0.250873219	-5.063036745	4.27791E-07	8.83439E-06	Nts
ENSMUSG00000035778	13.68510446	-5.618251566	1.113787827	-5.063036745	4.55245E-07	9.37649E-06	Gtg1a
ENSMUSG00000038291	720.4205647	-0.664849922	0.132084799	-5.032851739	4.81584E-07	9.90587E-06	Snx25
ENSMUSG00000020097	2560.082419	-0.460106662	0.091420667	-5.032851739	4.83237E-07	9.92676E-06	Sgpl1
ENSMUSG00000037851	2992.257377	-0.448557294	0.089146934	-5.031662615	4.86244E-07	9.97538E-06	Isls
ENSMUSG00000042797	630.2742858	-0.535043587	0.106501168	-5.023828345	5.06515E-07	1.03639E-05	Aqp11
ENSMUSG00000065037	151.5456269	-1.107822694	0.220542469	-5.023828345	5.08251E-07	1.03858E-05	Rn7sk
ENSMUSG00000020590	971.6633202	-0.707068582	0.140823787	-5.020945649	5.14177E-07	1.04453E-05	Xsk
ENSMUSG00000028291	559.6062207	-0.512238118	0.102093877	-5.017324554	5.2396E-07	1.06093E-05	Akirin2
ENSMUSG00000031886	7929.683453	-0.524987919	0.104848618	-5.007103866	5.25551E-07	1.11592E-05	Casp2e
ENSMUSG00000028159	399.1682053	-0.665616834	0.133112479	-5.000408972	5.72088E-07	1.15388E-05	Des1
ENSMUSG00000075703	2307.58671	-0.52234622	0.104587618	-4.994340902	5.9037E-07	1.18462E-05	Selenoi
ENSMUSG00000002846	408.3124127	-0.561449954	0.112545623	-4.988643195	6.08048E-07	1.21696E-05	Tlmdcd1
ENSMUSG00000031163	588.4718331	-0.570537298	0.114426145	-4.986074639	6.16183E-07	1.23008E-05	Glod5
ENSMUSG00000031585	633.4602852	-0.760669808	0.152580384	-4.985370923	6.18431E-07	1.23298E-05	Gtf2e2
ENSMUSG00000025161	2490.148334	-0.734264435	0.147344021	-4.983333749	6.2498E-07	1.24127E-05	Slc16a3
ENSMUSG00000058690	734.2518961	-0.493711363	0.099071554	-4.983381658	6.24825E-07	1.24127E-05	Csaser2
ENSMUSG00000026502	1471.680112	-0.471859294	0.094789673	-4.977961013	6.42576E-07	1.27297E-05	Desi2
ENSMUSG00000031447	8798.240236	-0.372072187	0.074801679	-4.974115464	6.55462E-07	1.2952E-05	Lamp1
ENSMUSG00000062762	2239.229217	-0.404220988	0.081291887	-4.972464074	6.61072E-07	1.30463E-05	Ei2a
ENSMUSG00000044786	551.5777031	-0.509701848	0.102545015	-4.97051804	6.67742E-07	1.31613E-05	Zfp36
ENSMUSG00000000881	633.7031515	-0.52555186	0.105758728	-4.969347416	6.71786E-07	1.32242E-05	Dlg3
ENSMUSG00000036216	253.3809551	-1.063359977	0.214161491	-4.965224938	6.86215E-07	1.34912E-05	Leap2
ENSMUSG00000059343	1737.679354	-0.465726335	0.093876215	-4.961068546	7.01064E-07	1.37485E-05	Alldoat1
ENSMUSG00000055114	1726.147048	-0.611066424	0.123321261	-4.955077635	7.23014E-07	1.41083E-05	Anxa13
ENSMUSG00000056888	37.55948358	-1.497766706	0.302269425	-4.955071807	7.23036E-07	1.41083E-05	Glpr1
ENSMUSG00000019774	181.8632373	-0.822372028	0.166068392	-4.952008129	7.34515E-07	1.42964E-05	Mtrf1l
ENSMUSG00000053012	1519.838874	-0.838357843	0.169362756	-4.950072027	7.4186E-07	1.44214E-05	Krcr1
ENSMUSG00000021208	3575.523645	-0.329174097	0.06651973	-4.948518264	7.47806E-07	1.45188E-05	Ifi2712b
ENSMUSG00000006736	1403.14	-0.458004216	0.092714178	-4.939958766	7.81391E-07	1.50956E-05	Tspan31
ENSMUSG00000037725	737.2508644	-0.678527437	0.137397984	-4.938408968	7.87625E-07	1.51972E-05	Ckap2
ENSMUSG00000028603	946.4215659	-0.469781118	0.0952247	-4.933395607	8.08122E-07	1.55445E-05	Scp2
ENSMUSG00000070583	118.9307222	-1.021869988	0.207138259	-4.933274963	8.08622E-07	1.55445E-05	Fv1
ENSMUSG00000026672	761.0718853	-0.635282864	0.129009916	-4.924294861	8.46651E-07	1.62555E-05	Optn
ENSMUSG00000021792	2069.705043	-0.974362964	0.198228397	-4.915355099	8.86217E-07	1.69109E-05	Fam213a
ENSMUSG00000097616	81.46592755	-1.104550174	0.224887732	-4.911562607	9.03534E-07	1.71992E-05	1110019D14Rik
ENSMUSG00000034528	5300.913523	-0.365498464	0.074435121	-4.910295792	9.09391E-07	1.72895E-05	Hsd17b13
ENSMUSG00000020248	580.0460812	-0.644350303	0.131315328	-4.906893297	9.25303E-07	1.75492E-05	Nfyb
ENSMUSG00000039633	430.7112657	-0.586619603	0.119546225	-4.907052518	9.24553E-07	1.75492E-05	Lonr1f
ENSMUSG00000029776	1076.378515	-0.549759552	0.112048102	-4.906460186	9.27348E-07	1.75666E-05	Hibadh
ENSMUSG00000052825	1454.496912	-0.594073425	0.121138279	-4.904093312	9.38599E-07	1.77151E-05	Gm9892
ENSMUSG00000055435	196.3497026	-0.802669925	0.163747152	-4.901886332	9.49208E-07	1.78288E-05	Maf
ENSMUSG00000022385	631.505346	-0.612511025	0.124975544	-4.901886332	9.53272E-07	1.78836E-05	Gtse1

ENSMUSG00000035227	2861.551785	-0.379983266	0.077557789	-4.899356612	9.6151E-07	1.79948E-05	Spes2
ENSMUSG00000025528	409.3695717	-1.155641204	0.235943875	-4.8944549	9.68419E-07	1.80841E-05	2010106E10Rik
ENSMUSG00000019779	1373.45106	-0.787473051	0.160825697	-4.896437984	9.75894E-07	1.81984E-05	Frk
ENSMUSG00000052396	885.314108	-0.717012447	0.146608277	-4.890668266	1.00494E-06	1.86953E-05	Mogat2
ENSMUSG000000084319	4004.062587	-0.46165038	0.094502447	-4.885062725	1.03396E-06	1.92121E-05	Tpt1-ps3
ENSMUSG00000104348	31.50188562	-1.798922772	0.368288144	-4.884552497	1.03664E-06	1.92399E-05	Gm37691
ENSMUSG00000040651	531.3510738	-0.80560599	0.165062915	-4.880599566	1.05764E-06	1.9582E-05	Fam208a
ENSMUSG00000020230	82.36899198	-1.079856133	0.221286848	-4.879892954	1.06143E-06	1.9629E-05	Prmt2
ENSMUSG00000029640	1171.660665	-0.393440661	0.080676837	-4.876748733	1.07849E-06	1.99207E-05	Usp12
ENSMUSG00000028293	760.2670958	-0.555225469	0.113999949	-4.870401046	1.11372E-06	2.05471E-05	Slc35a1
ENSMUSG00000028217	12391.94988	-0.492841645	0.101227093	-4.86867329	1.1235E-06	2.0703E-05	Cdh17
ENSMUSG00000019804	2381.565952	-0.378587946	0.077779057	-4.867479285	1.13031E-06	2.07792E-05	Snx3
ENSMUSG00000028300	261.5861672	-0.932047802	0.191604893	-4.864425877	1.1479E-06	2.10777E-05	3110043O21Rik
ENSMUSG00000023070	947.7645068	-0.48558233	0.100097254	-4.851105382	1.22775E-06	2.23856E-05	Rgn
ENSMUSG000000081957	120.77287	-0.939083184	0.193783295	-4.846048192	1.25945E-06	2.29367E-05	Ak3l2-ps
ENSMUSG000000052102	200.682289	-0.707856129	0.146103226	-4.844904168	1.26673E-06	2.30344E-05	Gnpda1
ENSMUSG00000025094	16.15815191	-2.412566866	0.498000797	-4.844504028	1.26928E-06	2.3035E-05	Slc18a2
ENSMUSG00000058655	12141.99027	-0.353789661	0.073043024	-4.843579057	1.27521E-06	2.31156E-05	Eif4b
ENSMUSG00000020062	10.74520415	-3.90337478	0.806486485	-4.839975443	1.29855E-06	2.3484E-05	Slc5a8
ENSMUSG00000024248	1890.120213	-0.381829929	0.078942332	-4.836820998	1.31932E-06	2.3832E-05	Cox7a2l
ENSMUSG00000050747	56.67145198	-1.313859659	0.271844971	-4.833121077	1.34409E-06	2.42232E-05	Trim15
ENSMUSG00000022253	1572.8152	-0.42024237	0.086963285	-4.832411383	1.34889E-06	2.42481E-05	Nadk2
ENSMUSG00000023883	1506.14685	-0.507892036	0.105103287	-4.832313543	1.34955E-06	2.42481E-05	Phf10
ENSMUSG00000024521	746.2939163	-0.646077257	0.133701765	-4.832226818	1.35014E-06	2.42481E-05	Pmaip1
ENSMUSG00000004936	1734.711556	-0.481903978	0.099764232	-4.8304284	1.3624E-06	2.44118E-05	Gnp2k1
ENSMUSG00000018238	118.7500403	-0.849966882	0.176042721	-4.828185327	1.37783E-06	2.466E-05	Gdf9
ENSMUSG000000080811	815.6461838	-0.476954344	0.099029729	-4.816274327	1.46263E-06	2.60878E-05	Gm14513
ENSMUSG00000012117	696.7903261	-0.475215258	0.098730975	-4.813233737	1.48507E-06	2.64578E-05	Dhdds
ENSMUSG000000037465	936.5965784	-0.437346262	0.090977466	-4.807193268	1.53064E-06	2.71453E-05	Klf10
ENSMUSG00000000308	6023.810184	-0.387199037	0.080573097	-4.805562266	1.54317E-06	2.73364E-05	Ckmt1
ENSMUSG00000070777	186.7913405	-0.794024951	0.165267534	-4.804482347	1.55152E-06	2.7422E-05	Ceacam20
ENSMUSG00000050592	132.1022519	-0.850721363	0.197716107	-4.801965391	1.57116E-06	2.77061E-05	Fam78a
ENSMUSG00000000056	549.4373435	-0.477665142	0.099554907	-4.798007018	1.60252E-06	2.81953E-05	Narf
ENSMUSG00000024883	383.8885938	-0.540425946	0.112714568	-4.794641488	1.62966E-06	2.86235E-05	Rin1
ENSMUSG00000054136	281.5636623	-1.123183464	0.234265255	-4.794494455	1.63086E-06	2.86235E-05	Adm2
ENSMUSG00000022453	1107.738616	-0.401794003	0.083900118	-4.788956364	1.67651E-06	2.93644E-05	Naga
ENSMUSG00000063931	795.0067764	-0.49160079	0.102895686	-4.777661802	1.77345E-06	3.09232E-05	Pepd
ENSMUSG000000082189	1714.292869	-0.464691918	0.097261535	-4.777756352	1.77262E-06	3.09232E-05	Gm4784
ENSMUSG00000026399	445.4201504	-0.823429661	0.1724008	-4.776251979	1.78593E-06	3.11059E-05	Cd55
ENSMUSG00000037580	395.4134002	-0.584737486	0.122441796	-4.775636288	1.7914E-06	3.11316E-05	Gch1
ENSMUSG00000022280	560.3535639	-0.575008873	0.12043861	-4.77429018	1.80342E-06	3.13056E-05	Rnf19a
ENSMUSG00000042770	261.2570929	-0.77653208	0.162818573	-4.769308971	1.84859E-06	3.19472E-05	Slim15
ENSMUSG00000052917	328.7182824	-0.790686967	0.165779946	-4.769497078	1.84686E-06	3.19472E-05	Senp7
ENSMUSG00000027341	139.6803071	-0.865585988	0.181613111	-4.766098556	1.87827E-06	3.24242E-05	Tmem230
ENSMUSG00000042510	257.89403	-0.629999083	0.132333984	-4.760674939	1.92947E-06	3.3271E-05	AA986860
ENSMUSG00000029053	263.7795265	-0.669926273	0.140808251	-4.757720278	1.95792E-06	3.37242E-05	Prkc2
ENSMUSG00000055493	93.31866568	-1.040328137	0.218696394	-4.756951479	1.96538E-06	3.37781E-05	Epm2a
ENSMUSG000000071180	963.8367675	-0.579134802	0.121741995	-4.757066794	1.96426E-06	3.37781E-05	Slim15
ENSMUSG000000114809	1223.752435	-0.435650754	0.091587687	-4.756651996	1.9683E-06	3.3791E-05	CT030664.1
ENSMUSG00000019838	849.1693951	-0.538585158	0.113233865	-4.756396496	1.97079E-06	3.37937E-05	Slc16a10
ENSMUSG000000028399	687.0971608	-0.514856254	0.108249703	-4.756190911	1.9728E-06	3.37937E-05	Ptpfrd
ENSMUSG00000039242	885.8554169	-0.440960784	0.092772109	-4.75316117	2.00261E-06	3.42666E-05	B3galnt2
ENSMUSG00000022235	469.5026035	-0.71152072	0.149715087	-4.752498453	2.00918E-06	3.43414E-05	Cmb1
ENSMUSG00000021996	1776.955865	-0.469095898	0.098761189	-4.749800015	2.03618E-06	3.47266E-05	Esd
ENSMUSG00000028780	400.8427132	-0.742685707	0.15639701	-4.74872063	2.04707E-06	3.48742E-05	Sema3c
ENSMUSG00000038708	2941.016986	-0.429906051	0.090554625	-4.74747757	2.05969E-06	3.50125E-05	Golga4
ENSMUSG00000004085	930.4862705	-0.529960897	0.111643054	-4.746922271	2.06535E-06	3.50705E-05	Map3k20
ENSMUSG00000033379	792.9084349	-0.570718423	0.120280799	-4.744883889	2.08626E-06	3.53484E-05	Atp6v0b
ENSMUSG00000030909	1888.22908	-0.46965845	0.09899314	-4.744353486	2.09173E-06	3.54026E-05	Anks4b
ENSMUSG00000053897	2515.915031	-0.346624534	0.073188197	-4.736071481	2.17901E-06	3.67997E-05	Slc39a8
ENSMUSG00000037788	628.3598481	-0.465818674	0.098363008	-4.73570994	2.1829E-06	3.68254E-05	Vopp1
ENSMUSG00000047371	659.424276	-0.494297363	0.104410872	-4.734156071	2.19968E-06	3.70685E-05	Zfp768
ENSMUSG00000032352	656.5773088	-0.525292185	0.111041741	-4.730583104	2.23876E-06	3.76862E-05	Lrrc1
ENSMUSG00000060002	1042.241546	-0.922641749	0.195205441	-4.726516552	2.28404E-06	3.84069E-05	Chpt1
ENSMUSG00000074183	1166.892231	-0.557228436	0.118223482	-4.713348213	2.43679E-06	4.08872E-05	Gsta1
ENSMUSG00000023959	915.5072648	-0.965506282	0.204964618	-4.710599774	2.46989E-06	4.13534E-05	Clic5
ENSMUSG00000028247	284.6142026	-0.690158215	0.146558053	-4.709111515	2.48799E-06	4.1567E-05	Coq3
ENSMUSG00000026354	553.0780239	-0.883006637	0.18758072	-4.707342189	2.50967E-06	4.18844E-05	Lct
ENSMUSG00000060467	425.7767062	-0.703637517	0.149600476	-4.703444373	2.55809E-06	4.26467E-05	Gm10080
ENSMUSG00000043286	48.33857424	-1.302280605	0.276939314	-4.70240424	2.57116E-06	4.28187E-05	Pnp1a1
ENSMUSG00000025745	3559.15951	-0.379304541	0.080672681	-4.701771841	2.57914E-06	4.29057E-05	Khlh9
ENSMUSG00000035775	733.9569423	-0.950948913	0.202578219	-4.69423079	2.67612E-06	4.43296E-05	Krt20
ENSMUSG00000002820	829.8000616	-0.538343446	0.114775945	-4.690385652	2.72691E-06	4.5075E-05	Atg4d
ENSMUSG00000052837	760.4417417	-0.838320862	0.178847086	-4.687361045	2.7675E-06	4.56976E-05	Junb
ENSMUSG00000074796	16.01425383	-2.392541346	0.510759793	-4.684278946	2.80947E-06	4.62924E-05	Slc4a11
ENSMUSG00000062284	1302.935221	-0.887589659	0.189500367	-4.683841374	2.81548E-06	4.63423E-05	Gm6030
ENSMUSG00000032246	3365.668274	-0.373099198	0.079775475	-4.676865896	2.91293E-06	4.76942E-05	Calml4
ENSMUSG00000032249	3717.792028	-0.368404184	0.078904049	-4.669014957	3.02647E-06	4.94493E-05	Anp32a
ENSMUSG00000060508	35.25044079	-2.138966316	0.458263308	-4.667548721	3.04814E-06	4.96991E-05	Nlpr9b
ENSMUSG00000070923	1682.678194	-0.386884691	0.082905677	-4.666564503	3.06278E-06	4.98854E-05	Khlh9
ENSMUSG00000068854	159.7665589	-0.735029434	0.157759539	-4.659175841	3.17478E-06	5.14741E-05	Hist2h2be
ENSMUSG000000084183	1006.047582	-0.598029238	0.128351409	-4.659311828	3.17268E-06	5.14741E-05	Gm12009
ENSMUSG000000106133	146.9858384	-0.78877697	0.169284249	-4.65948235	3.17006E-06	5.14741E-05	Gm3724
ENSMUSG00000043483	3446.447361	-0.387175541	0.083154933	-4.656074237	3.22296E-06	5.2167E-05	Gm6863
ENSMUSG00000058063	672.1509095	-0.495756104	0.106641712	-4.648801058	3.3387E-06	5.39283E-05	Trin31
ENSMUSG000000062169	810.4309893	-0.438754805	0.094497846	-4.643013826	3.43363E-06	5.53469E-05	Calm4
ENSMUSG00000032577	576.7337667	-0.51432596	0.110805026	-4.641720479	3.4552E-06	5.56369E-05	Mapkapk3
ENSMUSG00000038375	985.1720263	-0.432716126	0.093329557	-4.636431777	3.54475E-06	5.68947E-05	Trp53inp2
ENSMUSG00000051413	2826.476805	-0.329530375	0.071070893	-4.636643205	3.54113E-06	5.68947E-05	Prp2
ENSMUSG00000053930	26.32870329	-1.989849476	0.429172914	-4.636474972	3.54401E-06	5.68947E-05	Shisa6
ENSMUSG00000022744	994.3698085	-0.43386601	0.093623713	-4.634146604	3.58413E-06	5.74161E-05	Cldnd1
ENSMUSG00000062456	1274.690754	-0.62951758	0.135895744	-4.634146604	3.61526E-06	5.78554E-05	Rpl9-ps6

ENSMUSG0000000868	2118.860129	-0.495405282	0.107062483	-4.627253811	3.70546E-06	5.89957E-05 Rps18
ENSMUSG00000022445	2250.49801	-0.353987507	0.076496915	-4.627390279	3.70152E-06	5.89957E-05 Cyp2d26
ENSMUSG00000023476	39.95416447	-1.527337225	0.330064493	-4.627390279	3.70302E-06	5.89957E-05 Epb41l4a
ENSMUSG00000034640	590.5204698	-0.784775215	0.169707301	-4.624286689	3.7589E-06	5.97853E-05 Tiparp
ENSMUSG00000042650	3990.214927	-0.343723156	0.07433944	-4.623698477	3.76958E-06	5.9894E-05 Alkbh5
ENSMUSG00000041695	133.9821414	-0.829294062	0.179390213	-4.62285008	3.78503E-06	6.00782E-05 Kcnj2
ENSMUSG00000028656	2836.633667	-0.332098452	0.071849809	-4.622120195	3.79838E-06	6.02287E-05 Cap1
ENSMUSG00000033161	36177.78679	-0.299633805	0.064915753	-4.615733316	3.9171E-06	6.17965E-05 Atp1a1
ENSMUSG00000028199	170.3209287	-0.788865157	0.170918261	-4.61545274	3.92239E-06	6.18174E-05 Cryz
ENSMUSG00000027173	312.8033324	-0.79666752	0.172702808	-4.612939001	3.97015E-06	6.24436E-05 Depdc7
ENSMUSG00000107465	171.7371888	-0.764072357	0.165669439	-4.612029617	3.98756E-06	6.26542E-05 Gm5990
ENSMUSG00000036432	419.8008705	-0.543336517	0.117816358	-4.611723936	3.99343E-06	6.26832E-05 Siah2
ENSMUSG00000024292	2267.464522	-0.505013578	0.109518126	-4.61123283	4.00288E-06	6.27051E-05 Cyp4f14
ENSMUSG00000104802	154.7699333	-0.914161374	0.198336412	-4.609145464	4.04327E-06	6.32742E-05 Gm5869
ENSMUSG00000043079	127.1646593	-0.821554242	0.178359343	-4.606174416	4.10144E-06	6.41201E-05 Synpo
ENSMUSG00000028295	297.8037864	-0.658633516	0.143019783	-4.605191701	4.12086E-06	6.4359E-05 Smmim8
ENSMUSG00000034271	37.79342621	-1.62716953	0.354121713	-4.594944251	4.32865E-06	6.73341E-05 Jdp2
ENSMUSG00000020108	4094.704157	-0.817458178	0.178224761	-4.58667007	4.50372E-06	6.99176E-05 Ddit4
ENSMUSG00000104649	1712.767653	-0.424943698	0.092716882	-4.583239735	4.57827E-06	7.10042E-05 Gm43712
ENSMUSG00000061531	897.0327688	-0.91009728	0.198613432	-4.582254439	4.5999E-06	7.12687E-05 Tmem236
ENSMUSG00000033985	279.237647	-0.783694146	0.1711329	-4.57944758	4.66206E-06	7.20167E-05 Tesk2
ENSMUSG00000018849	1591.143559	-0.362524095	0.079257659	-4.573994475	4.78512E-06	7.34383E-05 Wwv1
ENSMUSG00000027187	2905.911723	-0.427092835	0.093375906	-4.573908317	4.78709E-06	7.34383E-05 Cat
ENSMUSG00000036781	1173.557484	-0.483050882	0.10560365	-4.574187388	4.78072E-06	7.34383E-05 Rps27l
ENSMUSG00000083544	2038.767713	-0.564118235	0.123455107	-4.569420003	4.89076E-06	7.4881E-05 Oat-rs1
ENSMUSG00000039145	2439.523497	-0.521580147	0.114238314	-4.565719912	4.97783E-06	7.60646E-05 Camk1d
ENSMUSG00000031482	3452.754117	-0.541124448	0.118533006	-4.565179497	4.99067E-06	7.61827E-05 Sclt2a15
ENSMUSG00000005107	180.5377882	-0.69547228	0.152452186	-4.561904274	5.06918E-06	7.7233E-05 Sclt2a9
ENSMUSG00000024479	4835.380014	-0.629850229	0.138117657	-4.560244072	5.10942E-06	7.77701E-05 Mal2
ENSMUSG00000110032	174.7542322	-0.996558482	0.219223665	-4.545852655	5.471133E-06	8.28736E-05 Gm8436
ENSMUSG00000007379	92.5941491	-1.060484428	0.233437375	-4.542907612	5.54836E-06	8.38772E-05 Dennd2c
ENSMUSG00000025278	3277.846653	-0.460739156	0.10156626	-4.536340683	5.72387E-06	8.63628E-05 Flnb
ENSMUSG00000022949	3893.356551	-0.308000782	0.068131237	-4.52069854	6.16359E-06	9.23708E-05 Clc6c
ENSMUSG00000001665	592.4142238	-0.428935453	0.095033012	-4.513541613	6.37539E-06	9.54531E-05 Gsst3
ENSMUSG000000062116	245.1534979	-0.657197255	0.14580725	-4.507301618	6.56573E-06	9.81141E-05 Zfp954
ENSMUSG00000071335	55.53133317	-1.153313686	0.255954369	-4.505934751	6.60814E-06	9.85588E-05 Mfsd4b3
ENSMUSG00000074479	1066.397538	-0.420999033	0.093518507	-4.501772406	6.73891E-06	0.000100413 Gm10704
ENSMUSG00000049922	2361.357975	-0.359109427	0.079804313	-4.499874922	6.79935E-06	0.000101023 Slc35c1
ENSMUSG00000030695	23576.66119	-0.492643259	0.109522245	-4.498111413	6.85598E-06	0.000101671 Aldoa
ENSMUSG00000031353	8831.503871	-0.408117518	0.090766421	-4.496349148	6.91302E-06	0.000102359 Rbbp7
ENSMUSG00000051000	130.821607	-0.800037698	0.17796174	-4.495560091	6.93871E-06	0.000102605 Famb160a1
ENSMUSG00000042207	874.5860134	-0.464294292	0.103308462	-4.4942523	6.98148E-06	0.000103139 Kdm5b
ENSMUSG00000037815	6921.008144	-0.302644103	0.067379163	-4.491657191	7.06711E-06	0.000104206 Ctnna1
ENSMUSG00000028550	209.4026876	-0.714440097	0.159144485	-4.489254522	7.14729E-06	0.000105189 Atg4c
ENSMUSG000000083161	7.000244043	-6.452396782	1.437474967	-4.488702015	7.16585E-06	0.000105363 Gm11427
ENSMUSG00000045410	523.8156568	-0.677671017	0.15099812	-4.48794339	7.1914E-06	0.000105639 Akr1e1
ENSMUSG00000041225	1206.502147	-0.631427785	0.140844775	-4.48314669	7.35503E-06	0.000107738 Arhgap12
ENSMUSG00000021213	2294.524015	-0.523862782	0.11686875	-4.482488105	7.37778E-06	0.000107869 Akr1c13
ENSMUSG00000042608	861.482153	-0.445489785	0.099384522	-4.482486589	7.37783E-06	0.000107869 Stk40
ENSMUSG00000021038	719.5407334	-0.40911101	0.091358915	-4.478063381	7.53232E-06	0.000109651 Vipas39
ENSMUSG000000074748	3136.226363	-0.377893006	0.08438992	-4.477940081	7.53667E-06	0.000109651 Atxn7l3b
ENSMUSG00000021748	983.7166951	-0.409170317	0.091464652	-4.473534956	7.6937E-06	0.000111648 Pdhb
ENSMUSG00000023994	948.1985431	-0.462070529	0.103307223	-4.472780448	7.7209E-06	0.000111939 Nfya
ENSMUSG00000042043	568.6974792	-0.472958509	0.105822995	-4.469335901	7.84628E-06	0.000113651 Tbca
ENSMUSG00000031381	534.0830701	-0.614896266	0.137597331	-4.46880955	7.86561E-06	0.000113825 Piga
ENSMUSG00000036853	32.77739895	-2.132687536	0.477807979	-4.463482461	8.06382E-06	0.000116153 Mcoln3
ENSMUSG00000039911	203.286068	-0.660698938	0.148036796	-4.463072395	8.07927E-06	0.000116268 Sp5b1
ENSMUSG00000028173	1205.763987	-0.439524648	0.098512129	-4.461629761	8.13387E-06	0.000116838 Wls
ENSMUSG00000051705	173.4485927	-0.805022567	0.180712836	-4.454706061	8.40082E-06	0.00012045 Senp8
ENSMUSG00000015243	91.68084991	-1.038217499	0.233095989	-4.454034166	8.42717E-06	0.000120717 Abca1
ENSMUSG00000019278	381.9506551	-0.818065548	0.18368466	-4.453641078	8.44262E-06	0.000120827 Dpep1
ENSMUSG00000040721	157.5353543	-0.726338947	0.163158327	-4.451743039	8.51761E-06	0.000121677 Zfhx2
ENSMUSG00000027488	94.27486236	-0.919918324	0.206688486	-4.450747808	8.55718E-06	0.000122131 Snta1
ENSMUSG00000034127	6122.818689	-0.327656037	0.073626114	-4.450269309	8.57627E-06	0.000122248 Tspan8
ENSMUSG00000026342	1008.476358	-0.46259538	0.104001323	-4.447975927	8.66832E-06	0.000123198 Slc35f5
ENSMUSG00000040511	394.6630359	-0.514468467	0.115697518	-4.44666813	8.72124E-06	0.000123791 Pvr
ENSMUSG00000025608	835.7023739	-0.621413791	0.139842135	-4.443680668	8.84328E-06	0.000125295 Podxl
ENSMUSG00000028990	455.4234338	-0.463713735	0.104384512	-4.442361472	8.89769E-06	0.000125836 Lzic
ENSMUSG00000011034	5487.450152	-0.722671714	0.162720581	-4.441182	8.94661E-06	0.000126299 Sclt5a1
ENSMUSG00000028223	843.6876602	-0.434776024	0.097969406	-4.437875492	9.08511E-06	0.000127906 Decr1
ENSMUSG00000030095	404.7085239	-0.5885577	0.132615635	-4.438071718	9.07684E-06	0.000127906 Tmem43
ENSMUSG00000020423	1518.173938	-0.393325747	0.088656212	-4.436527771	9.14215E-06	0.000128593 Btg2
ENSMUSG00000033213	275.7660852	-0.566612748	0.127759019	-4.435011743	9.20673E-06	0.000129268 AA467197
ENSMUSG00000026029	1139.392552	-0.563227689	0.127180956	-4.428553649	9.48671E-06	0.000132483 Casp8
ENSMUSG00000031853	1027.467447	-0.371435121	0.083867068	-4.428855468	9.47345E-06	0.000132483 Map3k21
ENSMUSG00000066800	1127.154682	-0.621084939	0.140245574	-4.428552878	9.48675E-06	0.000132483 Rnasel
ENSMUSG000000110277	327.3079541	-1.087895728	0.245639649	-4.428827895	9.47466E-06	0.000132483 Gm45871
ENSMUSG00000047084	492.5202625	-0.446934328	0.10097113	-4.426357596	9.58376E-06	0.000133717 Ngrn
ENSMUSG00000039131	1922.353713	-0.524447519	0.118547032	-4.423961602	9.69073E-06	0.000134847 Gipc2
ENSMUSG00000024105	226.9902064	-0.690364618	0.156180849	-4.42028983	9.85686E-06	0.000136915 Themis3
ENSMUSG00000079550	127.6764705	-0.93601149	0.211974499	-4.415679679	1.00693E-05	0.000139616 Mpp4
ENSMUSG00000096001	600.5343191	-0.51292904	0.116174603	-4.415156389	1.00937E-05	0.000139632 2610528A11Rik
ENSMUSG00000033386	1451.375285	-0.394257204	0.089343124	-4.41284327	1.02022E-05	0.000141207 Frrs1
ENSMUSG00000024592	235.3695988	-0.747805657	0.169494569	-4.411974147	1.02432E-05	0.00014165 C330018D20Rik
ENSMUSG00000033453	171.1143264	-0.664110784	0.150564157	-4.410815936	1.02982E-05	0.000142283 Adamts15
ENSMUSG00000057778	87.33225444	-1.005489149	0.227977346	-4.410478345	1.03143E-05	0.000142379 Cyb5d2
ENSMUSG00000031402	1414.131252	-0.555685765	0.126017108	-4.409605764	1.03559E-05	0.000142701 Mpp1
ENSMUSG00000001604	206.2198768	-0.610873161	0.138586735	-4.40787611	1.04389E-05	0.000143717 Tcea3
ENSMUSG00000079614	2385.019208	-0.45225196	0.102687888	-4.404141231	1.06204E-05	0.000145967 Seh1l
ENSMUSG00000041028	6777.650336	-0.481290182	0.109349819	-4.401380678	1.07564E-05	0.000147567 Ghitm
ENSMUSG00000027015	6039.682545	-0.431928005	0.098240389	-4.396643891	1.09937E-05	0.00015069 Cytbrd1
ENSMUSG00000027176	430.530413	-0.466405503	0.106104674	-4.396643891	1.10411E-05	0.000151072 Cstf3



ENSMUSG00000001663	883.9253811	-0.405234409	0.092201191	-4.395110347	1.10716E-05	0.000151358	Gstt1
ENSMUSG000000020250	5407.739656	-0.326437869	0.074340432	-4.391213183	1.12768E-05	0.000153757	Txnrd1
ENSMUSG000000037710	748.1022117	-0.441515614	0.100545247	-4.388884202	1.1272E-05	0.000153757	Cisd1
ENSMUSG000000027782	1510.840938	-0.42171166	0.096086304	-4.387603036	1.13934E-05	0.000155211	Kpna4
ENSMUSG00000011857	9.830115864	-3.744706527	0.853474322	-4.386702299	1.14607E-05	0.000155991	1190001M18Rik
ENSMUSG00000005656	2134.813874	-0.391155777	0.089168526	-4.38686379	1.15082E-05	0.000156365	Snx6
ENSMUSG000000045165	9.782503881	-3.418174656	0.779184132	-4.382663036	1.14997E-05	0.000156365	Al467606
ENSMUSG000000027122	464.5056475	-0.478348372	0.109145597	-4.38273295	1.17237E-05	0.000158739	Arl14ep
ENSMUSG000000053765	21.22987412	-2.194610474	0.500740177	-4.371592962	1.172E-05	0.000158739	Oas1f
ENSMUSG000000111336	290.0826854	-0.579673143	0.132599981	-4.362947227	1.23343E-05	0.000165996	Aldoa-ps4
ENSMUSG000000106755	1837.706455	-0.510997023	0.116975922	-4.360942416	1.25163E-05	0.00016801	Tpi-rs11
ENSMUSG000000056162	33.17623131	-1.594783749	0.365529003	-4.357208237	1.28322E-05	0.000171954	Cndp1
ENSMUSG000000102813	18.18530799	-2.643702323	0.606222708	-4.353086841	1.29503E-05	0.000173388	Gm37795
ENSMUSG000000034612	443.8409384	-0.572332431	0.131353013	-4.351379134	1.31732E-05	0.000176068	Chst11
ENSMUSG000000049555	178.4777179	-0.683539874	0.157024176	-4.342948461	1.34234E-05	0.000179105	Tmie
ENSMUSG000000079057	1094.61739	-0.69501059	0.159721911	-4.342359014	1.35284E-05	0.000180351	Cyp4v3
ENSMUSG000000040280	204.2905799	-0.718730784	0.16549374	-4.341349288	1.40583E-05	0.000186776	Ndufa4l2
ENSMUSG000000045667	312.0192975	-0.787122488	0.181266101	-4.339908032	1.40961E-05	0.000187119	Smtnl2
ENSMUSG000000082675	3761.176052	-0.517442556	0.11918934	-4.336777297	1.4161E-05	0.000187821	Gm382
ENSMUSG000000031521	358.4804129	-0.507666439	0.116976313	-4.335522143	1.42542E-05	0.000188896	Aga
ENSMUSG000000028443	448.3147481	-0.498519231	0.114951541	-4.324141793	1.44587E-05	0.000191443	Nudt2
ENSMUSG000000025103	750.8682665	-0.461109817	0.106356236	-4.326582131	1.45415E-05	0.000192375	Btd1
ENSMUSG000000026123	3534.94321	-0.322743374	0.074520431	-4.324496272	1.48475E-05	0.000196199	Plekhd2
ENSMUSG000000034613	524.0316802	-0.487592718	0.112696975	-4.324141793	1.51441E-05	0.000199331	Ppm1h
ENSMUSG000000044177	11.71240861	-2.77308447	0.641250286	-4.318296369	1.52881E-05	0.000201056	Wflkn2
ENSMUSG000000102298	191.8830986	-0.64459436	0.149068738	-4.318296369	1.53127E-05	0.00020121	Gm33707
ENSMUSG000000064138	609.6025898	-0.506844175	0.117371327	-4.318296369	1.57238E-05	0.000206091	Fam172a
ENSMUSG000000046058	34.82256171	-1.531871172	0.355013583	-4.312540468	1.59738E-05	0.000209191	Eid2
ENSMUSG000000061130	1454.18133	-0.423968216	0.098279633	-4.312540468	1.60402E-05	0.000209884	Ppm1b
ENSMUSG000000026427	681.9005648	-0.415350766	0.096312317	-4.30959954	1.61389E-05	0.000210822	Eif2d
ENSMUSG000000029334	1525.180564	-0.650054739	0.150958276	-4.308515646	1.66092E-05	0.000216239	Pkrq2
ENSMUSG000000030838	1287.468854	-0.379338629	0.088105272	-4.308515646	1.66597E-05	0.000216716	Ush1c
ENSMUSG000000041644	9.580681344	-3.438833642	0.799388161	-4.297772904	1.69392E-05	0.000219983	Slc5a12
ENSMUSG000000079173	154.7511737	-0.684792966	0.159218633	-4.297772904	1.7006E-05	0.000220667	Zan
ENSMUSG000000038975	909.4530968	-0.468106996	0.108918504	-4.297612732	1.72523E-05	0.00022349	Rabggtb
ENSMUSG000000042406	4212.26055	-0.393621452	0.091586149	-4.294979648	1.7248E-05	0.00022349	Atf4
ENSMUSG000000033916	1404.755745	-0.467278802	0.108796511	-4.292692768	1.74709E-05	0.000225947	Chmp2a
ENSMUSG000000037234	215.2281236	-0.680377427	0.158496651	-4.286673528	1.76519E-05	0.000228098	Hoak3
ENSMUSG000000029095	37.02299851	-1.394293886	0.325262439	-4.286052686	1.81369E-05	0.00023417	Alim2
ENSMUSG000000025421	481.8474966	-0.46302374	0.108030343	-4.28562544	1.81876E-05	0.00023463	Hdh2
ENSMUSG000000024026	910.2372003	-0.39118858	0.091280567	-4.284924096	1.82277E-05	0.000234954	Glo1
ENSMUSG000000073702	431.3620653	-0.490526742	0.114477347	-4.282509727	1.82802E-05	0.00023524	Rpl31
ENSMUSG000000020523	1124.296115	-0.423457126	0.098834514	-4.276310206	1.83145E-05	0.000235487	Fam114a2
ENSMUSG000000016526	148.2287177	-0.758074344	0.177016374	-4.27228359	1.84797E-05	0.000237415	Dyrk3
ENSMUSG000000031357	986.936792	-0.53798287	0.125805389	-4.270336629	1.90016E-05	0.00024392	Syp1
ENSMUSG000000037818	134.5019307	-0.990483732	0.231839416	-4.27017037	1.93481E-05	0.000247755	Abhd18
ENSMUSG000000021950	9.439395041	-3.165103438	0.741183591	-4.269032994	1.95178E-05	0.000249703	Anxa8
ENSMUSG000000083362	765.0383088	-0.45391043	0.106297967	-4.267254521	1.95324E-05	0.000249703	Gm8606
ENSMUSG000000035273	326.0812071	-0.526520849	0.123334921	-4.25985273	1.96322E-05	0.000250774	Hpse
ENSMUSG000000002250	468.3996393	-0.446065092	0.104532104	-4.259651227	1.97893E-05	0.000252367	Ppard
ENSMUSG000000025931	404.1546185	-0.506886595	0.118991577	-4.254216246	2.04562E-05	0.000260231	Paqr8
ENSMUSG000000021326	2354.301276	-0.418226208	0.098183205	-4.243865591	2.04746E-05	0.000260253	Trim27
ENSMUSG000000098019	38.87347599	-1.559743101	0.366610139	-4.242832659	2.09516E-05	0.000265666	Gm2546
ENSMUSG000000011488	108.1043168	-0.832646608	0.195722681	-4.242688076	2.09782E-05	0.000265787	Ac129219.2
ENSMUSG000000032578	44.33414379	-1.219566551	0.287260009	-4.242688076	2.18092E-05	0.000274528	Cish
ENSMUSG000000030105	2124.463478	-0.467755799	0.110219278	-4.239856543	2.19702E-05	0.000276108	Arl8b
ENSMUSG000000004843	1249.139335	-0.625258577	0.147368192	-4.239249096	2.20716E-05	0.000277114	Cntr2b
ENSMUSG000000075611	229.1873234	-0.804457363	0.189610301	-4.23663E-05	2.20858E-05	0.000277114	Gm11545
ENSMUSG000000067787	450.6344109	-0.468693338	0.110544622	-4.227829	2.23663E-05	0.000280181	Bicap
ENSMUSG000000053219	113.3691792	-0.924336551	0.218042519	-4.224857677	2.24269E-05	0.000280714	Raet1e
ENSMUSG000000019087	1545.058334	-0.357357065	0.084391784	-4.227639917	2.2906E-05	0.000286022	Atp6ap1
ENSMUSG000000025451	1406.292753	-0.382598079	0.090360981	-4.224857677	2.29461E-05	0.000286294	Paip1
ENSMUSG000000040548	999.4672973	-0.367318742	0.086885059	-4.221573206	2.36155E-05	0.000293939	Tex2
ENSMUSG000000019777	1894.075193	-0.369772687	0.087502357	-4.219214047	2.3803E-05	0.000296036	Hdac2
ENSMUSG000000028519	922.0481358	-0.52009244	0.123102949	-4.219214047	2.39092E-05	0.000296882	Daap1
ENSMUSG000000015653	848.995393	-0.504691543	0.119516337	-4.216317241	2.41304E-05	0.00029939	Steap2
ENSMUSG000000030735	802.0941275	-0.401931215	0.09520887	-4.2139125	2.42603E-05	0.000300284	Gm9755
ENSMUSG000000028081	2233.563973	-0.640753679	0.151865649	-4.21139125	2.45155E-05	0.000302962	Rps3a1
ENSMUSG000000076441	69.12717653	-1.060758955	0.251584237	-4.204319226	2.48324E-05	0.000306634	Ass1
ENSMUSG00000003644	3817.004701	-0.344014454	0.081686653	-4.198759744	2.53803E-05	0.000312903	Rps6ka1
ENSMUSG000000021696	1055.685982	-0.433243974	0.103047355	-4.198063893	2.68767E-05	0.000322337	Elovl7
ENSMUSG000000042826	75.89005216	-1.027912446	0.244662614	-4.195739179	2.65332E-05	0.000326084	Fgf11
ENSMUSG000000020911	13960.38991	-0.396192995	0.094359691	-4.193820463	2.68389E-05	0.000329581	Krt19
ENSMUSG000000021127	1364.999891	-0.324169146	0.077211192	-4.192769071	2.68767E-05	0.000329785	Zfp361
ENSMUSG000000020288	535.9522633	-0.456448616	0.108728363	-4.186755432	2.69207E-05	0.000330063	Ahsa2
ENSMUSG000000028389	70.29774554	-0.947656241	0.225861571	-4.185689338	2.71983E-05	0.000332421	Zfp37
ENSMUSG000000024145	424.6930241	-0.590429531	0.140745749	-4.175239886	2.72862E-05	0.000333234	Pigf
ENSMUSG000000052915	1321.251752	-0.36058873	0.085980965	-4.175249003	2.74295E-05	0.000334722	Msl1
ENSMUSG000000025262	163.432067	-0.797342399	0.190170836	-4.175085112	2.7557E-05	0.000336014	Fam120c
ENSMUSG000000035069	207.3585986	-0.655967178	0.156676737	-4.167903718	2.8297E-05	0.000344768	Oma1
ENSMUSG000000056313	490.1928594	-0.664973981	0.158868451	-4.166833421	2.84302E-05	0.000345579	Tcim
ENSMUSG000000031753	721.0963316	-0.43995982	0.105373543	-4.164787913	2.97672E-05	0.000360389	Cog4
ENSMUSG000000074579	49.36304375	-1.167315107	0.279579758	-4.164787913	2.9766E-05	0.000360389	Lekr1
ENSMUSG000000078945	1022.722387	-0.458200292	0.109746336	-4.160714608	2.97875E-05	0.000360389	Naip2
ENSMUSG000000044224	497.4140246	-0.465310648	0.11164141	-4.16028169	3.07414E-05	0.000369918	Dnajc21
ENSMUSG000000035891	1291.491619	-0.413759877	0.099298396	-4.160161553	3.0886E-05	0.000371371	Cerk
ENSMUSG000000081049	3186.877	-0.418418497	0.100463898	-4.160161553	3.11538E-05	0.000373851	Rps24-ps3
ENSMUSG000000083829	1773.217284	-0.412492695	0.099042905	-4.160161553	3.11642E-05	0.000373851	Gm2199
ENSMUSG000000031467	1354.335794	-0.384909714	0.092510482	-4.160161553	3.17253E-05	0.000379996	Agpat5
ENSMUSG000000022403	3037.067173	-0.336862171	0.080971001	-4.160161553	3.17855E-05	0.000380333	St13
ENSMUSG000000060147	3235.826164	-0.49323146	0.11856065	-4.160161553	3.18023E-05	0.000380333	Serpinb6a
ENSMUSG000000039470	735.7969242	-0.422620752	0.101645013	-4.160161553	3.21312E-05	0.000383089	Zdhc2

ENSMUSG00000039086	174.1284945	-0.686459048	0.165113105	-4.157507953	3.21738E-05	0.000383304	Ss181l
ENSMUSG00000029188	66.80265041	-1.006855577	0.242238871	-4.152539033	3.2322E-05	0.000384775	Slc34a2
ENSMUSG00000001986	6.926883859	-5.497945301	1.323996056	-4.152539033	3.28807E-05	0.000389752	Gria3
ENSMUSG00000052593	798.3602024	-0.470064046	0.113195198	-4.152685403	3.28596E-05	0.000389752	Adam17
ENSMUSG000000097711	26.4570856	-2.045021789	0.492482946	-4.152472298	3.28903E-05	0.000389752	Gm5523
ENSMUSG00000025810	142.0391218	-0.788531625	0.189907892	-4.152179345	3.29324E-05	0.000389955	Nrp1
ENSMUSG00000036299	523.334459	-0.445838043	0.10738065	-4.151940264	3.29668E-05	0.000390066	BC031181
ENSMUSG00000009733	109.4244031	-0.740183974	0.178638342	-4.14347762	3.42078E-05	0.000402608	Tfcp2
ENSMUSG00000018848	3182.198801	-0.33610982	0.081115746	-4.143582924	3.41921E-05	0.000402608	Rars
ENSMUSG00000076432	776.1968973	-0.440862079	0.106462859	-4.140994191	3.45804E-05	0.000406378	Ywhaq
ENSMUSG00000029571	883.4823301	-0.60557384	0.146312925	-4.138895046	3.48983E-05	0.000409496	Tmem106b
ENSMUSG00000032083	1763.018938	-0.578261796	0.139770025	-4.137237539	3.51512E-05	0.000412153	Apoa1
ENSMUSG00000028415	3645.045327	-0.554840213	0.134158572	-4.135704509	3.53867E-05	0.00041398	Spink4
ENSMUSG00000022270	812.9619886	-0.426494597	0.103191077	-4.133056925	3.5797E-05	0.000418465	Retreg1
ENSMUSG00000079588	81.03613327	-0.869868516	0.210493701	-4.13251566	3.58814E-05	0.000419137	Tmem182
ENSMUSG00000090150	471.4222929	-0.742597405	0.179877787	-4.128344128	3.65385E-05	0.000425854	Acad11
ENSMUSG00000011191	201.3570715	-0.619088949	0.150010319	-4.126975765	3.67565E-05	0.000428075	Gm6015
ENSMUSG00000027219	43.42647801	-1.21027351	0.293329539	-4.125985786	3.6915E-05	0.000429599	Slc28a2
ENSMUSG000000100204	602.7617045	-0.448218782	0.108742311	-4.121843447	3.75853E-05	0.000436746	Gm4849
ENSMUSG00000028437	1013.971505	-0.425989201	0.103408658	-4.119473257	3.79739E-05	0.000440277	Ubp1
ENSMUSG00000085912	9.980491476	-2.832023778	0.688930721	-4.110752637	3.94372E-05	0.000456223	Trp53cor1
ENSMUSG000000112693	111.8405043	-0.868804384	0.211481237	-4.108186601	3.98778E-05	0.000459613	Gm5512
ENSMUSG00000023073	26.10924187	-1.712946144	0.417081831	-4.106978573	4.00868E-05	0.000461681	Slc10a2
ENSMUSG00000022040	1209.81891	-0.571305602	0.139160718	-4.10536543	4.03676E-05	0.000464571	Ephx2
ENSMUSG00000031337	650.1500939	-0.519918447	0.126776982	-4.101047671	4.11284E-05	0.000472279	Mtm1
ENSMUSG00000015672	442.0167079	-0.47757575	0.116528636	-4.098355287	4.16096E-05	0.000477453	Mrp132
ENSMUSG00000028737	100.1847372	-0.774596519	0.189016169	-4.098043695	4.16657E-05	0.000477744	Alhd4a1
ENSMUSG00000081844	424.0241954	-0.578539627	0.141260426	-4.095553469	4.21161E-05	0.000482553	Gm11241
ENSMUSG00000026526	2540.230853	-0.312278147	0.076327268	-4.091305171	4.28952E-05	0.000491119	Fh1
ENSMUSG00000018648	200.9702464	-0.618772789	0.151516618	-4.083860868	4.42936E-05	0.000505271	Dusp14
ENSMUSG00000040734	232.802331	-0.640184683	0.156848823	-4.081539608	4.47384E-05	0.000509598	Ppp1r13l
ENSMUSG00000037022	125.1236783	-0.831784446	0.203843326	-4.080508599	4.49373E-05	0.000510743	Mmaa
ENSMUSG00000020021	226.7420379	-0.603977832	0.148051889	-4.079501025	4.51325E-05	0.000512446	Ggma
ENSMUSG00000024981	9517.390498	-0.613310904	0.150712451	-4.069410997	4.71321E-05	0.000532966	Acsf5
ENSMUSG00000066150	3800.82919	-0.563558658	0.138483572	-4.069498274	4.71145E-05	0.000532966	Slc31a1
ENSMUSG00000020883	287.6914355	-0.504645086	0.12403058	-4.068715047	4.72731E-05	0.000534173	Fbxl20
ENSMUSG00000018567	2655.092671	-0.330065646	0.081225074	-4.063593053	4.8323E-05	0.000544274	Gabarap
ENSMUSG00000070426	642.8551823	-0.4677962	0.115134339	-4.063046748	4.84363E-05	0.000544944	Rnf121
ENSMUSG00000026005	1788.362669	-0.628040247	0.154668789	-4.060024324	4.90676E-05	0.000551249	Rpe
ENSMUSG00000045464	59.56221455	-0.962686382	0.237203708	-4.058479477	4.93933E-05	0.000554508	2810002D19Rik
ENSMUSG00000034413	388.304564	-0.529620533	0.13053671	-4.057253564	4.96532E-05	0.000557024	Neur11b
ENSMUSG00000087700	82.82547841	-0.971844075	0.239552192	-4.05691998	4.97241E-05	0.000557418	Gm15283
ENSMUSG00000038150	581.5659164	-0.437887897	0.107971366	-4.055592811	5.00073E-05	0.000559787	Ormdl3
ENSMUSG00000098021	80.73362521	-0.970822956	0.239483518	-4.053819508	5.03881E-05	0.000562836	Gm9522
ENSMUSG00000021711	893.1137025	-0.37614516	0.092821725	-4.052339693	5.0708E-05	0.000565853	Trappc13
ENSMUSG00000037679	617.0653286	-0.56890374	0.140638794	-4.045140917	5.22917E-05	0.000580766	Inf2
ENSMUSG00000075229	657.6187544	-0.503254429	0.124443235	-4.04404811	5.25361E-05	0.000582499	Ccdc58
ENSMUSG00000030061	1077.00757	-0.629416478	0.155696687	-4.042581049	5.2866E-05	0.000585474	Uba3
ENSMUSG00000036775	539.7450603	-0.405445867	0.100300265	-4.042320993	5.29247E-05	0.000585708	Decr2
ENSMUSG00000025578	191.4960992	-0.595906532	0.147536705	-4.039039177	5.36706E-05	0.00059354	Cbx8
ENSMUSG00000033502	377.5104568	-0.580117889	0.143646627	-4.038506874	5.37925E-05	0.000594466	Cdc14a
ENSMUSG000000114607	677.420194	-0.587195262	0.145443254	-4.037280848	5.40743E-05	0.000596734	AC161252.3
ENSMUSG00000019810	2013.867977	-0.440603623	0.10920132	-4.03478295	5.46528E-05	0.000602239	Fuac2
ENSMUSG00000032370	106.3785902	-0.762151196	0.188927442	-4.034094713	5.48132E-05	0.000603178	Luca
ENSMUSG00000028252	393.3660719	-0.578008775	0.143307926	-4.033334304	5.4991E-05	0.000604706	Ccnc
ENSMUSG00000026064	302.4612909	-0.696685121	0.172903153	-4.029337288	5.59343E-05	0.000614212	Ptp4a1
ENSMUSG00000010554	708.3596969	-0.431310633	0.107105474	-4.026970936	5.65E-05	0.00061955	Mettl16
ENSMUSG00000027350	8634.193339	-0.317061487	0.078731684	-4.027114256	5.64656E-05	0.00061955	Chgb
ENSMUSG00000031696	3937.825916	-0.480586349	0.119348765	-4.026739179	5.65557E-05	0.000619725	Vps35
ENSMUSG00000030849	544.565436	-0.572043167	0.142075848	-4.026322376	5.6656E-05	0.000620387	Nqo1
ENSMUSG00000030208	1837.238421	-0.740328209	0.183991554	-4.02370757	5.7289E-05	0.000626438	Emp1
ENSMUSG00000028383	498.2831992	-0.632619549	0.157246429	-4.023109168	5.74349E-05	0.000627152	Hsd12
ENSMUSG00000040268	871.2143902	-0.481078776	0.119575871	-4.023209474	5.74104E-05	0.000627152	Plekha1
ENSMUSG00000052914	2941.854264	-0.641924788	0.159631334	-4.021295631	5.78789E-05	0.000631557	Cyp2j6
ENSMUSG00000040740	145.5782661	-0.65611347	0.163193504	-4.020463154	5.80838E-05	0.000632985	Slc25a34
ENSMUSG00000097906	1782.587962	-0.362774176	0.090232595	-4.020433794	5.80911E-05	0.000632985	Gm9625
ENSMUSG00000028180	1519.461143	-0.556302877	0.138378065	-4.020166607	5.8157E-05	0.000633261	Zranb2
ENSMUSG00000051184	94.34062657	-0.821779739	0.204448089	-4.019503159	5.8321E-05	0.000634579	Zfp524
ENSMUSG00000037523	1077.370548	-0.342601563	0.08524722	-4.018917748	5.84661E-05	0.000635293	Mavs
ENSMUSG00000054604	1858.684696	-0.402911747	0.100338962	-4.015506435	5.93183E-05	0.000643655	Cggbp1
ENSMUSG00000062054	545.6522711	-0.423953784	0.105612037	-4.014256304	5.96335E-05	0.000645412	Iah1
ENSMUSG00000052485	343.0342598	-0.526494561	0.131256462	-4.011189646	6.04136E-05	0.00065281	Tmem171
ENSMUSG00000061848	4668.33968	-0.319200008	0.079598899	-4.010105801	6.06915E-05	0.000654905	Gm5805
ENSMUSG00000028542	307.5972485	-0.708700954	0.176751538	-4.009588616	6.08246E-05	0.000655433	Slc6a9
ENSMUSG00000018604	791.8539184	-0.41669545	0.103944278	-4.008834908	6.10191E-05	0.000657073	Tbx3
ENSMUSG00000026204	34.27110875	-1.300848416	0.324553191	-4.008120858	6.12038E-05	0.000658152	Ptpnrr
ENSMUSG00000024095	1548.993474	-0.311050953	0.077611838	-4.007777152	6.12929E-05	0.000658656	Hnmp1l
ENSMUSG00000041733	792.8258588	-0.352199103	0.087896938	-4.006955315	6.15065E-05	0.000660495	Coq5
ENSMUSG00000031818	8417.376954	-0.332598336	0.083047612	-4.004911492	6.20407E-05	0.000665314	Cox4i1
ENSMUSG00000050390	3255.408501	-0.356673705	0.089066753	-4.004566148	6.21314E-05	0.000665828	C77080
ENSMUSG00000036534	372.0296307	-0.501252462	0.125220838	-4.002947676	6.25581E-05	0.00066948	Slc38a7
ENSMUSG00000017688	959.3700507	-0.498164607	0.124531411	-4.000312866	6.32588E-05	0.000675585	Hnf4g
ENSMUSG00000081853	66.22914129	-0.951238572	0.237947529	-3.99768208	6.39658E-05	0.000682129	Gm13735
ENSMUSG00000020572	2510.048154	-0.532300357	0.133243623	-3.994940577	6.47105E-05	0.000689669	Nampt
ENSMUSG00000022663	564.6539901	-0.394063897	0.09872789	-3.991414164	6.56805E-05	0.000699528	Atg3
ENSMUSG00000029090	1585.610931	-0.397908143	0.099703614	-3.990909938	6.58203E-05	0.000700538	Adgr3a
ENSMUSG00000022969	559.8933765	-0.580156651	0.145437843	-3.989035036	6.63426E-05	0.000705548	Il10rb
ENSMUSG00000031221	1586.200579	-0.318034377	0.079733167	-3.988733784	6.64269E-05	0.000705548	Igfbp1
ENSMUSG00000028229	116.5284497	-0.894911474	0.224563773	-3.985110605	6.74487E-05	0.000715913	Rmdn1
ENSMUSG00000055553	620.0979553	-0.389276588	0.097711566	-3.983935663	6.77832E-05	0.000718279	Kxd1
ENSMUSG00000014668	662.3217098	-0.39489239	0.09918253	-3.981471248	6.849E-05	0.000724988	Chfr
ENSMUSG00000052459	1890.230106	-0.448989217	0.112815174	-3.980498649	6.89543E-05	0.000728912	Atp6v1a

ENSMUSG00000067229	6209.785274	-0.655086294	0.164717933	-3.977018669	6.97847E-05	0.00073719	Cyp2c66
ENSMUSG00000005268	2606.059916	-0.594516514	0.149558482	-3.977018669	7.03367E-05	0.000742014	Prlr
ENSMUSG000000038539	2436.951609	-0.853183297	0.214752353	-3.972870542	7.10116E-05	0.000748364	Atf5
ENSMUSG000000022765	657.1635408	-0.437047067	0.110073736	-3.970493633	7.17239E-05	0.000754603	Snap29
ENSMUSG000000028673	2600.52375	-0.299578118	0.075485932	-3.968661601	7.22774E-05	0.000758889	Fuca1
ENSMUSG000000032496	11.56363392	-2.623670407	0.661070457	-3.968821144	7.22291E-05	0.000758889	Ltf
ENSMUSG000000043257	289.6522074	-0.571411905	0.144057437	-3.966556112	7.29186E-05	0.000763048	Pigv
ENSMUSG000000019817	188.2510405	-0.652518591	0.16481595	-3.959074289	7.52408E-05	0.000785238	Plagl1
ENSMUSG000000043421	184.0316676	-0.591994981	0.149552074	-3.958453832	7.54365E-05	0.000786753	Hilpda
ENSMUSG0000000102252	245.3103985	-0.687172909	0.173965253	-3.950058403	7.81321E-05	0.000811064	Snrpn
ENSMUSG000000027088	416.4445404	-0.518108371	0.131200829	-3.948971786	7.84876E-05	0.000813233	Phospho2
ENSMUSG000000079083	230.8519246	-0.6360651	0.161060242	-3.949237195	7.84006E-05	0.000813233	Jrkl
ENSMUSG000000036309	3689.890046	-0.356378278	0.090258848	-3.948402696	7.86744E-05	0.000813979	Skp1a
ENSMUSG000000070544	2325.205737	-0.424641263	0.107546577	-3.948440527	7.8662E-05	0.000813979	Top1
ENSMUSG000000032475	523.5385055	-0.580348503	0.147043031	-3.946793664	7.92048E-05	0.000818923	Nck1
ENSMUSG000000006717	859.5702065	-0.401774809	0.101919877	-3.942065297	8.0783E-05	0.000832891	Acto113
ENSMUSG000000027950	76.93459241	-0.823436005	0.209006406	-3.939764442	8.15617E-05	0.000839945	Chrb2
ENSMUSG000000021036	1974.454446	-0.461123869	0.117130206	-3.936848427	8.25587E-05	0.000849651	Sptlc2
ENSMUSG000000039208	409.536554	-0.452905242	0.115081259	-3.935525614	8.30148E-05	0.00085378	Mtctrl
ENSMUSG00000003546	728.7720119	-0.411272314	0.104532567	-3.934394075	8.34068E-05	0.000857246	Klc4
ENSMUSG000000030629	1414.118188	-0.377743864	0.096136282	-3.92925392	8.52098E-05	0.000874046	Zfand6
ENSMUSG000000034574	778.8148732	-0.444802749	0.113220316	-3.928647821	8.54248E-05	0.000875675	Daam1
ENSMUSG000000034667	1672.691755	-0.354639681	0.090310346	-3.926899821	8.60478E-05	0.000881848	Xpot
ENSMUSG000000084159	783.7204418	-0.471333675	0.120046562	-3.926257159	8.62779E-05	0.000883257	Gm12696
ENSMUSG000000027709	434.8129642	-0.466267259	0.118783088	-3.925367364	8.65975E-05	0.000885747	Mccc1
ENSMUSG000000040183	59.03969729	-1.15949659	0.295393336	-3.92526319	8.6635E-05	0.000885747	Ankrd6
ENSMUSG000000037419	352.2406669	-0.455296448	0.11603964	-3.923628582	8.72252E-05	0.000890612	Endod1
ENSMUSG000000022330	57.08856096	-1.091246863	0.278194529	-3.922603609	8.75972E-05	0.000893239	Os2r
ENSMUSG000000060438	3954.804851	-0.417192266	0.106362789	-3.922351696	8.76889E-05	0.000893589	Rps10-ps1
ENSMUSG000000021417	1059.020608	-0.366140854	0.093351233	-3.922185512	8.77494E-05	0.00089362	Eci2
ENSMUSG000000048787	294.1060034	-0.630034737	0.160666022	-3.92139376	8.80383E-05	0.000895391	Dcun1d3
ENSMUSG000000025781	4600.152549	-0.379876212	0.096885463	-3.920879338	8.82264E-05	0.000896521	Atx5c1
ENSMUSG000000000156	212.1300998	-0.547331568	0.139651583	-3.919265044	8.88194E-05	0.000899224	Mxd1
ENSMUSG000000012429	280.9771841	-0.552701109	0.141037368	-3.918827464	8.89808E-05	0.000899688	Mplkip
ENSMUSG000000029059	488.6644134	-0.439991073	0.112304133	-3.917852916	8.93412E-05	0.000902161	Fam213b
ENSMUSG000000082575	4625.162992	-0.310360358	0.079263783	-3.915538057	9.02028E-05	0.000909681	Gm13050
ENSMUSG000000090334	53.81930903	-1.05123426	0.268471445	-3.915627828	9.01693E-05	0.000909681	Gm17149
ENSMUSG000000025007	6450.192222	-0.251567466	0.064299212	-3.912450234	9.13644E-05	0.000920799	Aldh18a1
ENSMUSG000000028266	526.4032354	-0.426379143	0.109051072	-3.909903276	9.23331E-05	0.00092996	Lmo4
ENSMUSG000000042622	151.2206642	-0.695372428	0.177901008	-3.90876048	9.27709E-05	0.000933162	Maff
ENSMUSG000000002428	422.768226	-0.650876119	0.166631981	-3.906069622	9.38095E-05	0.000942392	Hlff
ENSMUSG000000010517	1128.466064	-0.345245789	0.088510802	-3.900606286	9.59521E-05	0.000963295	Faf1
ENSMUSG000000041571	781.3017462	-0.556972297	0.142845131	-3.899133937	9.65374E-05	0.000968546	Selenow
ENSMUSG000000028261	797.9581479	-0.584830676	0.150047362	-3.897640508	9.71345E-05	0.000973282	Ndufa4f4
ENSMUSG000000069913	545.7824285	-0.442325803	0.113528375	-3.896169602	9.7726E-05	0.000977322	Anp32-ps
ENSMUSG000000040811	556.2244719	-0.470740659	0.120889672	-3.893969182	9.86172E-05	0.00098497	Eml2
ENSMUSG000000020671	2630.114612	-0.337814752	0.086842536	-3.889968777	0.000100257	0.001000066	Rab10
ENSMUSG000000029009	412.1269093	-0.453569395	0.116811304	-3.882923814	0.000103208	0.001026869	Mthfr
ENSMUSG000000055737	767.8269388	-0.569766353	0.147005034	-3.87582885	0.000106262	0.001054564	Ghr
ENSMUSG000000022477	7853.259104	-0.2421728	0.06251454	-3.873863607	0.000107123	0.001061756	Aco2
ENSMUSG000000060935	311.8754302	-0.585268204	0.151076415	-3.873987901	0.000107069	0.001061756	Tmem263
ENSMUSG000000063684	831.7091013	-0.374653612	0.096772628	-3.871483299	0.000108175	0.001070136	Gm13910
ENSMUSG000000026604	51.21946657	-1.027373421	0.265447605	-3.870343531	0.000108682	0.001073787	Ptpn14
ENSMUSG000000022601	433.580239	-0.504777637	0.13052689	-3.867231021	0.000110078	0.0011085514	Zbtb11
ENSMUSG000000005615	1279.426993	-0.580390067	0.150088429	-3.866987424	0.000110188	0.001085911	Pcy11a
ENSMUSG000000056234	189.6876241	-0.764047552	0.19791993	-3.86038714	0.000113208	0.001113553	Ncoa4
ENSMUSG000000030605	1711.576381	-0.330248333	0.085561668	-3.859769679	0.000113494	0.001115666	Mfge8
ENSMUSG000000028249	4077.108493	-0.383703594	0.099470614	-3.857456777	0.000114573	0.00112422	Sdcbp
ENSMUSG000000097245	3063.193157	-0.298909336	0.077489042	-3.857440079	0.000114581	0.00112422	Gm5421
ENSMUSG000000006304	3883.518349	-0.341276337	0.088543224	-3.854347315	0.000116039	0.001136377	Arpc2
ENSMUSG000000061859	1358.888091	-0.321200446	0.083345368	-3.853848815	0.000116275	0.001137979	Patj
ENSMUSG000000028992	253.4687391	-0.521328342	0.135322285	-3.85249438	0.000116921	0.001142857	Nmnat1
ENSMUSG0000000097145	19.2982945	-1.720111526	0.446662684	-3.851030291	0.000117622	0.001148991	9230114K14Rik
ENSMUSG000000068876	1529.950195	-0.315138136	0.081936543	-3.846124379	0.000120001	0.001169209	Cgn
ENSMUSG000000002326	340.3506478	-0.473539896	0.123244343	-3.842285037	0.000121894	0.001184039	Gmpr2
ENSMUSG000000025240	1539.625764	-0.544072303	0.141642972	-3.841152836	0.000122458	0.001188772	Scml1
ENSMUSG000000022451	5986.465628	-0.448741576	0.116971819	-3.836322098	0.000124891	0.001211633	Tw1f
ENSMUSG0000000039678	1218.2489	-0.319979787	0.083503334	-3.831940235	0.000127137	0.001231888	Tbc1d13
ENSMUSG000000023456	12247.09866	-0.345310591	0.090205498	-3.828043732	0.000129166	0.001249994	Tpi1
ENSMUSG000000001157	910.1639466	-0.414603982	0.108426218	-3.823835151	0.000131392	0.00126917	Gmcl1
ENSMUSG000000025059	251.6051156	-0.795860083	0.208474394	-3.817543581	0.000134787	0.001298743	Gk
ENSMUSG000000060487	42.143633	-1.35257941	0.35433737	-3.817207909	0.00013497	0.001299706	Samd5
ENSMUSG000000003949	23.13889705	-1.617564513	0.423813396	-3.816690383	0.000135254	0.001301054	Hlf
ENSMUSG0000000033671	1457.133002	-0.509883848	0.133594712	-3.816646922	0.000135278	0.001301054	Cep350
ENSMUSG000000073764	24.63800431	-1.500253248	0.393225945	-3.815244816	0.000136048	0.001307656	Gm12888
ENSMUSG000000098037	23.51963595	-1.519709468	0.398362052	-3.81489517	0.000136241	0.001308701	Gm7765
ENSMUSG0000000032342	272.2556109	-0.49785381	0.130515787	-3.814510265	0.000136453	0.001309935	Mto1
ENSMUSG000000084013	169.7182293	-0.648117443	0.170004268	-3.812359837	0.000137646	0.001319538	Gm14270
ENSMUSG000000047822	92.83707803	-0.842068693	0.220910941	-3.811801664	0.000137958	0.001321118	Angptl8
ENSMUSG0000000032652	191.5428755	-0.617074014	0.161919397	-3.810995021	0.000138409	0.001323808	Cerebl2
ENSMUSG000000021807	948.0055487	-0.3742517	0.098208255	-3.81079677	0.00013852	0.001324057	Rtraf
ENSMUSG000000022010	2018.261122	-0.419289887	0.110086457	-3.808732683	0.000139681	0.001334338	Tsc22d1
ENSMUSG0000000091931	133.975043	-0.787988107	0.206915554	-3.808259415	0.000139948	0.001336074	Gon7
ENSMUSG000000066568	1782.721953	-0.377986079	0.099322933	-3.805627425	0.000141445	0.001347884	Lsm14a
ENSMUSG000000027439	854.0254695	-0.416020053	0.109338472	-3.804882628	0.000141871	0.001351119	Gzf1
ENSMUSG000000025979	1447.528662	-0.533409334	0.140203624	-3.804533148	0.000142072	0.001352201	Mob4
ENSMUSG000000075027	11.72666156	-2.161148272	0.568448074	-3.801839382	0.000143626	0.001365322	4631405J19Rik
ENSMUSG000000031536	214.9940997	-0.532036991	0.140035004	-3.799314291	0.000145097	0.001377625	Polb
ENSMUSG0000000024187	4384.999305	-0.301034995	0.079237927	-3.799127583	0.000145206	0.001377823	Fam234a
ENSMUSG000000043065	165.1077127	-0.586546369	0.154413728	-3.798537721	0.000145552	0.001380265	Spice1
ENSMUSG000000026426	348.9507746	-0.444799902	0.117117119	-3.797906796	0.000145923	0.00138294	Arl8a
ENSMUSG000000021250	157.6667714	-0.627017584	0.165187558	-3.797906796	0.000147173	0.001393936	Fos

ENSMUSG00000021686	1964.181728	-0.361923096	0.095370852	-3.794902629	0.000147701	0.001397405	Ap3b1
ENSMUSG00000019647	129.671879	-0.783094316	0.206400143	0.000148204	0.001400298	Sema6a	
ENSMUSG00000028228	2406.327863	-0.53453136	0.140986052	-3.791377599	0.000149814	0.001411224	Cpne1
ENSMUSG00000024127	713.583857	-0.379414947	0.100110175	-3.789973877	0.000150663	0.001417508	Prepl
ENSMUSG00000020099	945.0236494	-0.438497084	0.115727436	-3.789050367	0.000151224	0.00142107	Unc5b
ENSMUSG00000098557	236.2702449	-0.54545066	0.143968733	-3.788674439	0.000151453	0.001422363	Kctd12
ENSMUSG00000073678	2542.620943	-0.617427058	0.163031721	-3.787159064	0.00015238	0.001429371	Pgcl1
ENSMUSG00000027519	909.0115652	-0.359907096	0.095049928	-3.786505733	0.000152781	0.001432237	Rab22a
ENSMUSG00000026027	280.3691696	-0.550874085	0.145503974	-3.785972792	0.000153108	0.001434447	Stradb
ENSMUSG00000037411	59.68983618	-0.950260318	0.251340007	-3.780776202	0.00015634	0.001462964	Serpine1
ENSMUSG00000020402	5680.028582	-0.26514028	0.070133427	-3.780512234	0.000156506	0.001463637	Vdac1
ENSMUSG00000030884	6223.564757	-0.304125058	0.08049294	-3.778282374	0.000157914	0.001475916	Uqcrc2
ENSMUSG00000049580	340.8009597	-0.451128945	0.11946714	-3.776175992	0.000159254	0.001484881	Tsku
ENSMUSG00000054387	1248.363801	-0.620712387	0.164411164	-3.775366421	0.000159773	0.001488821	Mdm4
ENSMUSG00000029484	253.530465	-0.550199069	0.145905516	-3.770927141	0.000162642	0.00151343	Anxa3
ENSMUSG00000085438	2979.915349	-0.507314636	0.134583762	-3.769508516	0.000163569	0.00152056	1700020I14Rik
ENSMUSG00000027012	1577.513605	-0.364133488	0.09661151	-3.769048709	0.000163871	0.001522455	Dync1i2
ENSMUSG00000078941	244.1985503	-0.536765973	0.142440392	-3.768355074	0.000164327	0.00152578	Ak6
ENSMUSG00000033793	925.0400251	-0.324626404	0.086180863	-3.766803809	0.000165351	0.001532546	Atp6v1h
ENSMUSG00000028397	383.5256225	-0.532181837	0.141295602	-3.766443043	0.00016559	0.001533849	Kdm4c
ENSMUSG00000058706	748.4753661	-0.438486431	0.116440118	-3.765767661	0.000166038	0.001537087	0610030E20Rik
ENSMUSG00000037613	71.11536389	-0.878898361	0.233443567	-3.764928593	0.000166597	0.001540653	Tnfrsf23
ENSMUSG00000042605	860.5571046	-0.351598299	0.093414586	-3.763847982	0.000167319	0.001545266	Atxn2
ENSMUSG00000060450	820.4542477	-0.354765387	0.094265275	-3.763479048	0.000167566	0.001546631	Rnf14
ENSMUSG00000037280	2440.305028	-0.317994776	0.084514378	-3.762611553	0.000168148	0.001551088	Galtnt6
ENSMUSG00000047996	109.8713202	-0.715607945	0.190232374	-3.761756889	0.000168724	0.001555478	Prrg1
ENSMUSG000000087132	17.73416628	-1.845551586	0.490692032	-3.761119937	0.000169154	0.001558522	A930001C03Rik
ENSMUSG00000025888	919.5683964	-0.480459496	0.127769639	-3.760357295	0.000169671	0.001561816	Caspl
ENSMUSG00000026615	3742.208527	-0.314033829	0.083516344	-3.760148157	0.000169813	0.001561816	Eprs
ENSMUSG000000885105	50.56115811	-0.978478317	0.260280767	-3.759318549	0.000170377	0.001565155	Gm12758
ENSMUSG00000084260	668.9251737	-0.3482379	0.092647733	-3.758730945	0.000170777	0.001567909	Gm12844
ENSMUSG00000066705	33.62941597	-1.213796127	0.323034985	-3.757475768	0.000171636	0.001574864	Fxyd6
ENSMUSG00000024640	3328.613109	-0.329650448	0.087738098	-3.757209885	0.000171818	0.001575609	Psal1
ENSMUSG00000030823	95.38585161	-0.735045553	0.195769836	-3.754641516	0.00017359	0.00158998	9130019O22Rik
ENSMUSG00000012819	14.0976508	-1.947620563	0.518832645	-3.753851233	0.000174138	0.001594066	Cdh23
ENSMUSG00000034522	843.226488	-0.344752213	0.091853645	-3.753277423	0.000174538	0.001596782	Zfp395
ENSMUSG00000005534	962.3078474	-0.576088315	0.153518972	-3.752554531	0.000175042	0.001600455	Insr
ENSMUSG00000073530	121.7036251	-0.805059118	0.214612463	-3.751222585	0.000175974	0.00160758	Papa2
ENSMUSG00000021906	703.9645483	-0.406422483	0.108356596	-3.750786674	0.000176281	0.001608948	Onmad1
ENSMUSG00000003721	456.4672979	-0.529664833	0.141268152	-3.749357683	0.000177288	0.001616052	Insig2
ENSMUSG00000040774	1028.846152	-0.571752766	0.152562504	-3.747662433	0.00017849	0.001624355	Hept1
ENSMUSG00000019977	941.673374	-0.352617444	0.094104586	-3.747080331	0.000178905	0.001626227	Hbs1l
ENSMUSG00000058748	341.7688379	-0.975029696	0.260227558	-3.746834901	0.00017908	0.001626868	Zfp958
ENSMUSG00000041959	2763.769896	-0.325379472	0.086984213	-3.740672726	0.000183528	0.001660526	S100a10
ENSMUSG00000001098	1276.757124	-0.352166759	0.094193479	-3.738759449	0.000184931	0.001672215	Kctd10
ENSMUSG00000082258	522.779129	-0.57439777	0.153708149	-3.736937663	0.000186275	0.001682418	Gm15289
ENSMUSG00000029772	2565.741142	-0.390708594	0.104567557	-3.736422693	0.000186657	0.001683913	Ahcy12
ENSMUSG00000045730	7.964089347	-2.905120575	0.777770954	-3.735187793	0.000187575	0.001690239	Adrb2
ENSMUSG00000020647	868.0501348	-0.339652485	0.091068391	-3.729641875	0.000191752	0.00172588	Ncoa1
ENSMUSG00000034663	850.6535634	-0.421983969	0.113231777	-3.726727436	0.000193982	0.001742928	Bmp2k
ENSMUSG00000023247	699.8477788	-0.352471218	0.094594059	-3.726145384	0.00019443	0.001744942	Guca2a
ENSMUSG00000025958	1262.991391	-0.51105982	0.137181523	-3.72542752	0.000194984	0.001747901	Creb1
ENSMUSG00000021281	81.70396074	-0.771428419	0.20730307	-3.721259027	0.000198232	0.001774968	Tnfrsf2
ENSMUSG00000099881	160.528509	-0.621898797	0.167272515	-3.717877968	0.000200903	0.001796821	2810013P06Rik
ENSMUSG00000108028	106.7803876	-0.754055903	0.202836204	-3.717560717	0.000201156	0.001798045	Gm8143
ENSMUSG00000028221	607.2306378	-0.389015533	0.104649588	-3.717315494	0.000201351	0.001798758	Tmem55a
ENSMUSG00000035757	339.3101886	-0.597400077	0.160932756	-3.712109894	0.000205539	0.001833014	Slenoo
ENSMUSG00000000628	989.0504168	-0.453418131	0.122151607	-3.711929308	0.000205685	0.001833273	Hk2
ENSMUSG000000061315	2006.436164	-0.31517994	0.084952031	-3.710093029	0.000207183	0.001845565	Naca
ENSMUSG000000071456	104.4908957	-0.777325011	0.209702985	-3.706790391	0.000209903	0.001868128	1110002L01Rik
ENSMUSG00000080848	1118.236181	-0.351093793	0.094718036	-3.706725859	0.000209956	0.001868128	Gm9385
ENSMUSG00000029416	372.6623718	-0.516119572	0.139307175	-3.704903013	0.000211472	0.00188054	Slc15a4
ENSMUSG00000018882	1130.228199	-0.385789109	0.104135812	-3.704672776	0.000211664	0.001881174	Mrlp45
ENSMUSG00000036611	156.4929643	-0.613715921	0.165768523	-3.702246426	0.000213699	0.001897096	Eepd1
ENSMUSG00000051435	89.07281389	-0.8759921	0.236664703	-3.701405784	0.000214408	0.001902308	Hfad1
ENSMUSG00000003382	1001.780951	-0.31508115	0.085145081	-3.700520876	0.000215157	0.001907868	Etv3
ENSMUSG00000042508	530.448477	-0.634970357	0.171698432	-3.69817214	0.000217158	0.001924508	Dmtf4
ENSMUSG00000031530	826.3258893	-0.358620983	0.097086042	-3.693847002	0.000220887	0.001955331	Dusp4
ENSMUSG00000021518	1196.073869	-0.313017395	0.084805729	-3.690993506	0.00022338	0.001974034	Ptdss1
ENSMUSG00000051022	131.8030318	-0.636207476	0.172402106	-3.69025351	0.000224031	0.001978662	Hs3st1
ENSMUSG00000034165	645.4063228	-0.434679405	0.117862612	-3.688017753	0.000226008	0.001993863	Cnd3
ENSMUSG00000030231	1034.963706	-0.317824292	0.086233079	-3.685642384	0.000228126	0.002006869	Plekha5
ENSMUSG00000031286	61.49815979	-1.136027584	0.308282929	-3.685016193	0.000228688	0.002010673	Glt28d2
ENSMUSG00000029048	2239.240539	-0.351969527	0.095543587	-3.683863434	0.000229725	0.002018653	Rer1
ENSMUSG00000028034	1715.92871	-0.295404742	0.080197878	-3.683448347	0.0002301	0.002019665	Fubp1
ENSMUSG00000070985	208.597	-0.539845694	0.1465933	-3.682608247	0.00023086	0.002025193	Actn1
ENSMUSG00000036879	603.5205149	-0.369859577	0.100484844	-3.680749857	0.000232549	0.002038863	Pknox1
ENSMUSG00000044792	461.3094215	-0.4051702	0.110117625	-3.679430976	0.000233755	0.002047131	Isca1
ENSMUSG00000000399	1841.774576	-0.298649369	0.081191181	-3.678347385	0.00023475	0.00205469	Ndufa9
ENSMUSG00000021238	403.2803305	-0.528099484	0.143607696	-3.677375925	0.000235646	0.002058886	Aldh6a1
ENSMUSG00000073481	3299.226503	-0.304093253	0.082693054	-3.677373611	0.000235648	0.002058886	Marc2
ENSMUSG00000091337	489.4571198	-0.487245371	0.132501553	-3.677280462	0.000235734	0.002058886	Eid1
ENSMUSG00000037400	2478.948342	-0.48202091	0.131183313	-3.674407194	0.000238402	0.002076153	Atp11b
ENSMUSG00000033845	1380.719731	-0.304747592	0.082975767	-3.672730046	0.000239973	0.002086331	Mrlp15
ENSMUSG00000046062	3873.812817	-0.297117661	0.080958229	-3.670011856	0.000242539	0.00210629	Ppp1r15b
ENSMUSG00000075520	750.6899087	-0.519047128	0.141464946	-3.669086529	0.000243419	0.002112749	Malr1d
ENSMUSG00000034848	412.6369038	-0.428470331	0.116864682	-3.666379975	0.000246008	0.002132848	Ttc21b
ENSMUSG00000022770	1285.250914	-0.329220899	0.08981317	-3.665619422	0.000246741	0.00213764	Dlg1
ENSMUSG00000082076	561.65906	-0.356122118	0.097181071	-3.664521441	0.000247801	0.00214362	Gm8659
ENSMUSG00000055415	1186.814213	-0.608505616	0.166087633	-3.663762354	0.000248537	0.002148793	Atp10b
ENSMUSG00000021577	8974.196509	-0.24070884	0.065719641	-3.662662129	0.000249608	0.002155415	Sdha
ENSMUSG00000110148	21.83770826	-1.480984231	0.404437616	-3.662662129	0.000250414	0.002160221	5830408C22Rik



ENSMUSG00000081732	464.2508236	-0.485739912	0.132682055	-3.660931478	0.0002513	0.002166662	Gm15495
ENSMUSG00000027274	626.8867433	-0.391960439	0.107092651	-3.659257017	0.000252203	0.002173244	Mkks
ENSMUSG000000334607	467.3904439	-0.773432741	0.211363328	-3.659257017	0.000252948	0.002178455	Pof1b
ENSMUSG00000061689	1709.929042	-0.333391676	0.091140295	-3.658005217	0.000254186	0.002185493	Dlgap4
ENSMUSG00000024747	437.834038	-0.693072432	0.189500192	-3.657370606	0.000254816	0.0021897	Aldh1a7
ENSMUSG00000017390	1658.144168	-0.303957442	0.083271138	-3.650213599	0.000262022	0.002245284	Aldoc
ENSMUSG00000073664	645.8714668	-0.685534886	0.187813189	-3.650089171	0.000262149	0.002245284	Nbeal1
ENSMUSG00000043430	7.364122014	-3.259393923	0.89335047	-3.648505297	0.00026377	0.002256687	Psap1l
ENSMUSG00000022125	208.0174809	-0.535680031	0.146958637	-3.645107498	0.00026728	0.002285457	Cln5
ENSMUSG00000091831	2997.307287	-0.299667576	0.082235516	-3.644016476	0.000268416	0.002293913	Gm4707
ENSMUSG00000058076	3875.407082	-0.245766685	0.067518497	-3.639990468	0.000272648	0.002327524	Sdhc
ENSMUSG00000050608	1287.594452	-0.320350212	0.088062542	-3.637757953	0.000275022	0.002345215	Minos1
ENSMUSG00000048949	527.6337346	-0.534236812	0.146871164	-3.637452012	0.000275348	0.002346213	Gm6206
ENSMUSG00000020553	558.4710478	-0.369744009	0.101712236	-3.635196928	0.000277768	0.002362169	Pctp
ENSMUSG00000021339	1467.416108	-0.291222436	0.080120088	-3.634824234	0.00027817	0.002364295	Mrs2
ENSMUSG00000028274	393.0852134	-0.480080733	0.132191445	-3.631708039	0.000281552	0.002390425	Rngt
ENSMUSG00000040609	2082.746666	-0.303125729	0.083509029	-3.629855728	0.00028358	0.002406332	Dnaj3
ENSMUSG00000046667	39.42299437	-1.095943258	0.302055696	-3.628282044	0.000285313	0.002418408	Rbm12b1
ENSMUSG00000097657	781.2457674	-0.390565469	0.107705749	-3.626226748	0.000287593	0.002435078	Gm7389
ENSMUSG00000066026	289.9187856	-0.488289319	0.134752652	-3.623597086	0.000290534	0.002453311	Dhrs3
ENSMUSG00000021286	474.2185294	-0.41301919	0.114027437	-3.622103591	0.000292217	0.002466185	Zfyve21
ENSMUSG00000036257	625.850852	-0.561883464	0.155188662	-3.620647649	0.000293866	0.002478762	Pnp1a8
ENSMUSG00000030643	189.3962867	-0.99883853	0.275927966	-3.61992496	0.000294688	0.00248435	Rab30
ENSMUSG00000044674	137.9989773	-0.647087623	0.178778108	-3.619501463	0.000295171	0.002487072	Fzd1
ENSMUSG00000040102	500.1634832	-0.416399508	0.115059796	-3.618983536	0.000295762	0.002490707	Klhl42
ENSMUSG00000031513	552.5915424	-0.370382358	0.10238551	-3.61752711	0.000297431	0.002502053	Leprotl1
ENSMUSG00000060716	1345.157114	-0.31974335	0.088450844	-3.614927073	0.000300432	0.002521849	Plekhh1
ENSMUSG00000021816	1384.565418	-0.357199548	0.098830106	-3.614278721	0.000301185	0.002526805	Ppp3cb
ENSMUSG00000022664	410.339397	-0.554241781	0.153373592	-3.613671526	0.000301891	0.002531369	Slc35a5
ENSMUSG00000033487	1665.949265	-0.425574534	0.118161511	-3.601634156	0.000316223	0.002643001	Fncd3a
ENSMUSG00000034394	142.097185	-0.58916876	0.163633242	-3.600544439	0.000317552	0.00265268	Lif
ENSMUSG00000001700	1400.914869	-0.488265675	0.135641119	-3.599687757	0.0003186	0.002657158	Gramd3
ENSMUSG00000032348	5497.26212	-0.301062609	0.083678823	-3.597835136	0.000320877	0.002674719	Gsta4
ENSMUSG00000021113	303.5389845	-0.429305929	0.119331531	-3.597590051	0.000321179	0.002675807	Snappc1
ENSMUSG00000014551	628.4488398	-0.361255599	0.100480671	-3.595278117	0.000324045	0.002696797	Mrsps25
ENSMUSG00000026175	7220.911135	-0.268955538	0.074820127	-3.594695013	0.000324772	0.002699958	Vil1
ENSMUSG00000085627	305.747487	-0.517604956	0.143986128	-3.594825153	0.00032461	0.002699958	Gm11222
ENSMUSG00000057982	403.1353692	-0.453768124	0.12624837	-3.594249363	0.000325328	0.002700287	Zfp809
ENSMUSG00000015488	1472.361418	-0.311537189	0.086691796	-3.593617908	0.000326118	0.002705372	Cad1
ENSMUSG0000004665	293.8216446	-0.463894677	0.129130078	-3.592460301	0.000327571	0.002715975	Cnn2
ENSMUSG00000014905	267.3571794	-0.538276939	0.149864414	-3.591759541	0.000328453	0.002721841	Dnabj9
ENSMUSG00000025937	936.4889498	-0.469257058	0.130717687	-3.589851304	0.000330867	0.002738917	Lactb2
ENSMUSG00000046721	8414.258935	-0.300769019	0.08378635	-3.58971384	0.000331041	0.002738917	Rpl14-ps1
ENSMUSG00000038641	14.17567236	-1.94843775	0.542843524	-3.589317478	0.000331545	0.002741628	Akr1d1
ENSMUSG00000049791	448.6382786	-0.472851597	0.131791944	-3.587864185	0.000333398	0.002755148	Fzd4
ENSMUSG00000028518	1153.224105	-0.625253467	0.174309279	-3.587034897	0.00033446	0.002761331	Prkaa2
ENSMUSG00000021218	5863.8372	-0.512179936	0.142854113	-3.58533558	0.000336645	0.002776462	Gdi2
ENSMUSG00000056938	567.6218794	-0.353609466	0.098636578	-3.584972958	0.000337113	0.002778819	Acbd4
ENSMUSG00000049090	1539.490855	-0.420172887	0.117227743	-3.584244437	0.000338055	0.002785111	Zadh2
ENSMUSG00000092230	207.9071565	-0.680944302	0.190129504	-3.581476246	0.000341658	0.002810333	Gm18889
ENSMUSG00000024645	474.8425381	-0.400953588	0.112002007	-3.579878607	0.000343754	0.002821872	Timm21
ENSMUSG00000032279	3392.731629	-0.326650383	0.091242137	-3.580038724	0.000343543	0.002821872	Idh3a
ENSMUSG00000091971	13.42653834	-1.971017435	0.550822183	-3.578318912	0.000345811	0.002835507	Hspa1a
ENSMUSG00000025081	32.93432534	-1.309694544	0.366155425	-3.576881436	0.000347718	0.00284814	Tdrd1
ENSMUSG00000038770	21.6318638	-1.425901599	0.398731593	-3.576093852	0.000348766	0.002855228	Kpna7
ENSMUSG00000038462	4613.909267	-0.267987481	0.07502041	-3.572194293	0.000354003	0.00289353	Uqcrls1
ENSMUSG00000026341	3493.110328	-0.41652033	0.116630402	-3.571284345	0.000355235	0.002899471	Actr3
ENSMUSG00000041058	1112.693045	-0.462352546	0.129470334	-3.571108018	0.000355474	0.002899471	Wwp1
ENSMUSG00000048154	1095.665248	-0.335522025	0.093948387	-3.571344189	0.000355154	0.002899471	Kmt2d
ENSMUSG00000034557	763.5254286	-0.393319021	0.110247258	-3.567608184	0.000360255	0.002930786	Zfyve9
ENSMUSG00000109953	9.779128691	-2.389741811	0.670125343	-3.566111676	0.000362317	0.002944488	5430430B14Rik
ENSMUSG00000037514	787.0548467	-0.354271394	0.099371	-3.565138661	0.000363664	0.002952351	Pank2
ENSMUSG00000053119	1971.864622	-0.400495732	0.112357671	-3.564471639	0.00036459	0.002958327	Chmp3
ENSMUSG00000036356	29.91381232	-1.187406201	0.333140936	-3.564275878	0.000364862	0.002958993	Csgalnact1
ENSMUSG00000048234	1270.197891	-0.304641475	0.085485328	-3.563669701	0.000365706	0.002962752	Rnf14r
ENSMUSG00000041915	1220.977737	-0.326595354	0.091694409	-3.561780462	0.000368348	0.002979508	Annmeecr1l
ENSMUSG00000021700	92.24663645	-0.793052936	0.222749704	-3.560287278	0.000370449	0.002993392	Rab3c
ENSMUSG00000022707	253.9912915	-0.471789669	0.132579062	-3.558553377	0.000372903	0.003011656	Gbe1
ENSMUSG00000105741	49.36476802	-1.268437078	0.356751049	-3.555524455	0.000377226	0.003038688	C79130
ENSMUSG00000027472	452.6347378	-0.445480643	0.125377518	-3.553114222	0.000380699	0.003061914	Pdrg1
ENSMUSG00000031068	458.2855373	-0.539890456	0.152094254	-3.549709755	0.000385656	0.003095387	Glnr3
ENSMUSG00000081413	517.6649816	-0.466048427	0.131516658	-3.543645599	0.000394635	0.00316094	Uqcrlh-ps2
ENSMUSG00000022865	3098.021558	-0.552020279	0.155911924	-3.54059052	0.000399233	0.003194477	Cxadr
ENSMUSG00000080921	1823.173196	-0.309192325	0.08733752	-3.5402004	0.000399823	0.00319756	Rpl38-ps2
ENSMUSG00000020585	2837.111304	-0.2950425	0.083404098	-3.53750604	0.000403925	0.003228704	Laptn4a
ENSMUSG00000033917	152.8404731	-0.744819306	0.21060848	-3.536511475	0.000405449	0.003237561	Gde1
ENSMUSG00000041886	624.0575459	-0.510840215	0.144494443	-3.535362362	0.000407216	0.003248343	Macc1
ENSMUSG00000024766	45.2538979	-1.027133059	0.290543433	-3.535213471	0.000407446	0.00324851	Lipo3
ENSMUSG00000063065	2474.550632	-0.275042825	0.077845953	-3.533167952	0.000410612	0.003268728	Mapk3
ENSMUSG00000027487	188.8706057	-0.522175808	0.147820488	-3.532499545	0.000411651	0.003275328	Cdk5rap1
ENSMUSG00000025428	28977.03627	-0.226339138	0.064092625	-3.531438088	0.000413307	0.003286822	Atp5a1
ENSMUSG00000031446	1568.844856	-0.294817507	0.083497465	-3.530855767	0.000414218	0.003290793	Cul4a
ENSMUSG00000041459	3526.152878	-0.267662529	0.075878834	-3.527499247	0.000419505	0.003328962	Tardbp
ENSMUSG00000081888	519.2875216	-0.382373846	0.108517802	-3.523604764	0.000425719	0.003371753	Spes2-ps
ENSMUSG00000020089	1920.686237	-0.258697391	0.073427937	-3.52314664	0.000426455	0.003374155	Ppa1
ENSMUSG00000019864	346.1569994	-0.446861015	0.126934342	-3.520410685	0.000430879	0.003398793	Rtn4ip1
ENSMUSG00000051379	574.4320625	-0.417102956	0.118475344	-3.520588706	0.00043059	0.003398793	Flrt3
ENSMUSG00000060961	2395.350966	-0.505391332	0.143558991	-3.520443612	0.000430826	0.003398793	Slc4a4
ENSMUSG00000080743	15.92816145	-1.621328392	0.460539126	-3.520500868	0.000430733	0.003398793	Gm7150
ENSMUSG00000023150	5745.049946	-0.316111216	0.089883311	-3.516906658	0.000436607	0.003440492	Inns1abp
ENSMUSG00000033400	419.3745288	-0.441489114	0.125579526	-3.515613891	0.000438739	0.003455539	Ag1
ENSMUSG00000031960	2805.275621	-0.359360479	0.102283867	-3.514242428	0.00044247	0.003476139	Aars



ENSMUSG00000078861	69.88313741	-0.888852271	0.252986754	-3.513434026	0.000442354	0.003476139	Zfp931
ENSMUSG00000107951	32.46881956	-1.270225112	0.361721717	-3.50996844	0.000445403	0.003497416	Gm6210
ENSMUSG00000063239	11.37046571	-1.986297125	0.565901705	-3.50996844	0.00044816	0.003515515	Gm4
ENSMUSG00000026353	1203.830513	-0.289127515	0.082387727	-3.50935176	0.0004492	0.003521903	Ubxn4
ENSMUSG00000004558	744.0008788	-0.43368408	0.123629668	-3.507928869	0.00045161	0.003539012	Ndr2
ENSMUSG00000025037	4484.418336	-0.599858264	0.171024796	-3.507434468	0.00045245	0.003543811	Maoa
ENSMUSG00000030614	346.6525588	-0.478969151	0.13662013	-3.505846102	0.000455158	0.003561442	Tmem126b
ENSMUSG00000025232	1727.953385	-0.268854998	0.076702758	-3.505154232	0.000456343	0.003568917	Hexa
ENSMUSG00000031838	4103.76639	-0.322206421	0.091960732	-3.503739188	0.000458774	0.003584334	Ifi30
ENSMUSG00000019979	738.0955568	-0.417905874	0.119296946	-3.503072704	0.000459924	0.003589712	Apaf1
ENSMUSG00000032120	366.3458693	-0.413901691	0.118152994	-3.503099458	0.000459878	0.003589712	C2cd2l
ENSMUSG00000061825	1124.753481	-0.405285844	0.115815839	-3.499399119	0.000466308	0.003632257	Ces2c
ENSMUSG00000020268	74.62855283	-0.761273603	0.217573696	-3.498922968	0.000467142	0.00363693	Lym7
ENSMUSG00000110370	197.9497376	-0.752894362	0.215445971	-3.494585488	0.000474799	0.003681817	Gm5749
ENSMUSG00000048373	4457.750983	-0.249883296	0.071519876	-3.49390001	0.000476019	0.003689446	Fgfbp1
ENSMUSG00000022092	52.28051651	-0.928992063	0.265946078	-3.493159474	0.000477341	0.003696013	Ppp3cc
ENSMUSG00000041845	109.079258	-0.674798946	0.193172482	-3.493245723	0.000477187	0.003696013	Rhod
ENSMUSG00000012405	707.610995	-0.453598965	0.129982023	-3.489705383	0.000483553	0.003742251	Rpl15
ENSMUSG00000019851	2224.001093	-0.343884884	0.098630275	-3.486605747	0.000489192	0.003783089	Perp
ENSMUSG00000027377	774.5508959	-0.321844275	0.092376784	-3.484038531	0.000493908	0.003814805	Mall
ENSMUSG00000021221	22.0485184	-1.426093956	0.409634783	-3.48137906	0.000498839	0.003850978	Dpf3
ENSMUSG00000032978	434.4304419	-0.480201008	0.138039884	-3.47871206	0.00050383	0.003881807	Guca2b
ENSMUSG00000024150	1995.620564	-0.394046035	0.113345769	-3.47649531	0.000508013	0.003908237	Mcf2
ENSMUSG00000074698	1545.345169	-0.369975156	0.106435711	-3.476043439	0.00050887	0.003912895	Csnk2a1
ENSMUSG00000031796	1450.975756	-0.56268308	0.161933612	-3.474776317	0.000511279	0.003929483	Dynl13
ENSMUSG00000089682	534.9878517	-0.357196551	0.10281312	-3.47423123	0.000512319	0.003935532	Bcl2l2
ENSMUSG00000032612	1486.542784	-0.287358469	0.082755371	-3.472384525	0.000515857	0.003956851	Usp4
ENSMUSG00000050549	116.0870043	-0.617484781	0.177846887	-3.472002195	0.000516592	0.00396054	Fastk21a
ENSMUSG00000026718	798.52278	-0.452957346	0.130481834	-3.471420755	0.000517712	0.00396331	Stam
ENSMUSG00000039428	1520.089981	-0.41179496	0.118624419	-3.471418151	0.000517717	0.00396331	Tmem135
ENSMUSG00000105540	55.75141195	-0.858048107	0.247166457	-3.471539458	0.000517483	0.00396331	Gm7988
ENSMUSG00000045690	7608.008826	-0.357189811	0.102920102	-3.470554397	0.000519385	0.003974126	Wdr89
ENSMUSG00000029060	450.3807342	-0.491813214	0.141735342	-3.469940572	0.000520574	0.003981263	Mib2
ENSMUSG00000020111	1142.613303	-0.324988324	0.093694571	-3.468592906	0.000523192	0.003997358	Micu1
ENSMUSG00000051977	117.9252188	-0.616347651	0.177831318	-3.465911741	0.000528437	0.004029524	Prdm9
ENSMUSG00000027086	372.3846752	-0.453474934	0.130870632	-3.4650626	0.000530108	0.004040031	Fastkd1
ENSMUSG00000055976	175.9672225	-0.549181763	0.158496382	-3.464948263	0.000530333	0.004040031	Cldn23
ENSMUSG00000048550	214.9958815	-0.73489116	0.212257871	-3.46225634	0.000535667	0.004078663	Thnsl1
ENSMUSG00000041681	33.78853212	-1.09200356	0.315572808	-3.460385474	0.000539403	0.004105102	lapp
ENSMUSG00000031232	2966.281906	-0.506958874	0.146525996	-3.459856178	0.000540464	0.00411117	Magt1
ENSMUSG00000028646	1368.206528	-0.273047066	0.079157182	-3.44942885	0.000561774	0.004260779	Rragc
ENSMUSG00000028544	164.0675814	-0.550622648	0.159657394	-3.448776375	0.000563133	0.00426693	Sic5a9
ENSMUSG00000055065	3877.505525	-0.288753118	0.083726117	-3.448781897	0.000563121	0.00426693	Ddx17
ENSMUSG00000027339	320.5586762	-0.471994466	0.136898924	-3.447758777	0.000565259	0.004280954	Rassf2
ENSMUSG00000028343	1447.600585	-0.345290971	0.10021199	-3.445605356	0.000569782	0.004313113	Erp44
ENSMUSG00000027423	4121.16288	-0.400180281	0.116297814	-3.440995738	0.000579578	0.004376626	Snx5
ENSMUSG00000027508	307.0086756	-0.53163176	0.154526254	-3.44039764	0.00058086	0.004384185	Pag1
ENSMUSG00000029166	80.49761016	-0.731843388	0.212732701	-3.440201644	0.000581281	0.004385235	Mapre3
ENSMUSG00000032621	700.8063952	-0.383439587	0.111517052	-3.438394206	0.000585175	0.00441034	Srek1
ENSMUSG00000032092	2276.707978	-0.349139468	0.101555988	-3.437901346	0.000586241	0.004416237	Mpzl2
ENSMUSG00000005683	7694.238062	-0.251070513	0.073046715	-3.437122551	0.00058793	0.004426814	Cs
ENSMUSG00000025477	1613.72673	-0.297189066	0.086502604	-3.435608322	0.000591225	0.004447326	Inpp5a
ENSMUSG00000062098	932.2889551	-0.354760574	0.103258722	-3.435647529	0.00059114	0.004447326	Btdb3
ENSMUSG00000020150	160.031498	-0.539183386	0.157063395	-3.432902911	0.000597156	0.004487603	Gamt
ENSMUSG00000022800	1298.219525	-0.508847352	0.14834624	-3.430133131	0.000603285	0.004524929	Fyttd1
ENSMUSG00000021687	1575.496767	-0.505709686	0.147540535	-3.427598289	0.000608946	0.004561303	Scamp1
ENSMUSG00000039865	1159.192449	-0.301035642	0.087878302	-3.425596926	0.00061345	0.004590115	Sic4a3
ENSMUSG00000074656	1383.373697	-0.439642492	0.128444555	-3.42281921	0.000619753	0.004632823	Eif2s2
ENSMUSG00000024507	1466.631918	-0.291445481	0.085194311	-3.420950057	0.000624028	0.004651709	Hsd17b4
ENSMUSG00000004383	447.7636125	-0.360570018	0.105480881	-3.418344763	0.000630032	0.004687165	Large1
ENSMUSG00000078870	35.49833953	-1.221347134	0.357393551	-3.417373717	0.000632285	0.00470168	Gm14410
ENSMUSG00000000838	1321.1991	-0.369322676	0.108159438	-3.41461348	0.000638726	0.004743746	Fmr1
ENSMUSG00000056899	191.3136081	-0.536675184	0.157251521	-3.412845744	0.000642883	0.00477137	Immp2l
ENSMUSG00000100701	433.55215	-0.463779619	0.135954626	-3.411282372	0.000646581	0.004795759	Gm19587
ENSMUSG00000020818	303.3220724	-0.483608422	0.141818146	-3.410060255	0.000649485	0.004811197	Mfsd11
ENSMUSG00000027287	599.9745606	-0.477230362	0.140025446	-3.408168854	0.000654004	0.004842367	Snap23
ENSMUSG00000026730	598.1732414	-0.356037821	0.104489404	-3.407405992	0.000655835	0.004853615	Pter
ENSMUSG00000025823	2338.549812	-0.273524276	0.080305053	-3.406065584	0.000659063	0.004875191	Pdia4
ENSMUSG00000032328	1979.095798	-0.504108024	0.148022465	-3.405618357	0.000660144	0.004880865	Tmem30a
ENSMUSG00000025878	343.3376213	-0.528892009	0.155308935	-3.405419064	0.000660626	0.00488211	Uimc1
ENSMUSG00000002475	183.4845996	-0.527000862	0.154770471	-3.405047864	0.000661525	0.004886432	Abhd3
ENSMUSG00000071415	3394.566993	-0.275894016	0.081055722	-3.40375744	0.000664657	0.00490492	Rpl23
ENSMUSG00000014956	5041.469337	-0.42707998	0.125490854	-3.403275735	0.00066583	0.004908863	Ppp1cb
ENSMUSG00000034484	1144.606328	-0.311562926	0.091552536	-3.403105352	0.000666246	0.004908863	Snx2
ENSMUSG00000028344	108.8456672	-0.651905082	0.191731746	-3.400089435	0.000673638	0.004957098	Invs
ENSMUSG00000015112	1287.861358	-0.327429458	0.096318952	-3.399429183	0.000675267	0.004962047	Sic25a13
ENSMUSG00000021877	3868.070515	-0.244146109	0.071823817	-3.399236061	0.000675744	0.00496321	Arf4
ENSMUSG00000114295	161.8882355	-0.578183392	0.170116834	-3.398742959	0.000676963	0.00496748	AC168881.1
ENSMUSG00000011969	123.0419844	-0.683252471	0.201061788	-3.398221396	0.000678255	0.004972274	Gm129
ENSMUSG00000063694	99.13220353	-1.070589126	0.315061297	-3.398034406	0.000678719	0.004973332	Cyts
ENSMUSG00000021665	1162.666836	-0.385623436	0.113571812	-3.395415023	0.000685246	0.00501544	Hexb
ENSMUSG00000020078	1798.196688	-0.361600139	0.106560387	-3.393382373	0.000690352	0.005044332	Vps26a
ENSMUSG00000012123	912.75966	-0.312724135	0.092173756	-3.392767617	0.000691903	0.005053294	Crbg2
ENSMUSG00000031878	631.3976415	-0.392945871	0.115882196	-3.390908054	0.000696615	0.005082937	Nae1
ENSMUSG00000047789	194.4934628	-0.505504577	0.149074178	-3.390960028	0.000696483	0.005082937	Sic38a9
ENSMUSG00000057667	241.1572906	-0.498491724	0.147032884	-3.390341741	0.000698055	0.00508868	Bloc1s3
ENSMUSG00000043881	223.825893	-0.552010923	0.162847517	-3.389741105	0.000699587	0.005095071	Kbtbd7
ENSMUSG00000031431	550.5033963	-0.332353744	0.09808696	-3.388358071	0.000703124	0.005116049	Tsc22d3
ENSMUSG00000003541	257.5508365	-0.48992635	0.144602915	-3.388080731	0.000703835	0.005118833	Ier3
ENSMUSG00000084106	654.0567588	-0.457825528	0.13519141	-3.386498664	0.000707906	0.005138838	Gm6136
ENSMUSG00000015932	11791.79304	-0.396178938	0.117168957	-3.381261975	0.000721537	0.005223178	Dstn
ENSMUSG00000019861	620.1402142	-0.457352122	0.135255872	-3.381261975	0.000721215	0.005223178	Gopc

ENSMUSG00000047675	2585.61476	-0.482370268	0.142691897	-3.38050217	0.000723535	0.005232775	Rps8
ENSMUSG00000038936	429.6842477	-0.373561046	0.110577395	-3.378410725	0.000729416	0.005270413	Sccpdh
ENSMUSG00000034853	371.5499975	-0.541934857	0.160425593	-3.37810725	0.000729866	0.005271217	Acto11
ENSMUSG00000020182	785.9243959	-0.304200504	0.090132506	-3.375036568	0.000738059	0.005327916	Ddc
ENSMUSG00000021939	11046.56499	-0.206768475	0.061270514	-3.374681559	0.000739012	0.005332321	Ctsb
ENSMUSG00000037161	73.23923458	-0.758014311	0.224660597	-3.374042094	0.00074073	0.005342248	Mgarp
ENSMUSG000000087178	15.96291546	-1.621740127	0.481045055	-3.371285306	0.000748183	0.00538602	A230056P14Rik
ENSMUSG00000060992	3097.696465	-0.261727603	0.077643555	-3.370886384	0.000749268	0.005391333	Copz1
ENSMUSG00000044988	56.65381585	-1.04542996	0.310221458	-3.369947281	0.000751826	0.00540468	Ucn3
ENSMUSG00000042155	689.8811543	-0.4220489	0.125337956	-3.367287229	0.000759116	0.005442077	Klhl23
ENSMUSG00000046691	2411.581534	-0.274751554	0.081652922	-3.364871043	0.000765794	0.005482778	Chtf8
ENSMUSG00000028024	575.8089673	-0.667599394	0.198579651	-3.361872126	0.00077416	0.005534637	Enpep
ENSMUSG00000025326	2095.333398	-0.537223298	0.159805337	-3.361735646	0.000774542	0.005534832	Ube3a
ENSMUSG00000110173	189.3731972	-0.563994291	0.167811508	-3.360879692	0.000776947	0.005549466	Gm6929
ENSMUSG00000009863	2421.178963	-0.257588251	0.076691718	-3.358749236	0.000782961	0.005589859	Sdhb
ENSMUSG000000019806	872.1664798	-0.322971531	0.096185269	-3.357806604	0.000785636	0.005606385	Aig1
ENSMUSG00000024259	1305.646725	-0.391266898	0.116567973	-3.356555745	0.000789198	0.005629227	Slc25a46
ENSMUSG000000081164	891.6845421	-0.326975472	0.097417811	-3.356423929	0.000789574	0.005629333	Gm8722
ENSMUSG00000046020	1330.705399	-0.271231114	0.080832875	-3.355455506	0.000792344	0.005643911	Pofut1
ENSMUSG00000102752	128.6260413	-0.60871992	0.181488751	-3.354036648	0.000796418	0.005662569	Gm7694
ENSMUSG00000043252	686.5154116	-0.324711124	0.096915101	-3.350469843	0.000806746	0.005733382	Tmem64
ENSMUSG00000036667	135.92788	-0.545271596	0.162894223	-3.347396759	0.000815744	0.0057894	Tca1
ENSMUSG00000020621	427.6287737	-0.399597873	0.119398898	-3.346746735	0.000817659	0.005800348	Rdh14
ENSMUSG00000042428	1114.733396	-0.382730391	0.114387606	-3.345907861	0.000820136	0.005812628	Mgat3
ENSMUSG00000005882	954.8650739	-0.339613485	0.101537997	-3.344693569	0.000823735	0.005832825	Uqccl1
ENSMUSG000000021280	691.0511034	-0.313388199	0.093795267	-3.34119416	0.000834189	0.005890772	Exoc3l4
ENSMUSG00000042680	348.1785508	-0.407877078	0.122090088	-3.340787806	0.00083541	0.005896725	Garem1
ENSMUSG00000024725	578.4788722	-0.324904085	0.09729774	-3.33927678	0.000839968	0.005923526	Ostf1
ENSMUSG00000037552	308.7169012	-0.424664092	0.127182549	-3.339012263	0.000840769	0.005926486	Plekkg2
ENSMUSG00000030104	1233.141912	-0.422638399	0.126698228	-3.33578777	0.000850581	0.005984608	Edem1
ENSMUSG00000111242	101.0236829	-0.806349556	0.241752915	-3.335428479	0.000851681	0.005987141	Gm8155
ENSMUSG000000015501	242.7730607	-0.566965593	0.169999964	-3.335092435	0.00085271	0.005988974	Hivep2
ENSMUSG000000026199	357.0880901	-0.412932469	0.123861328	-3.333828859	0.000856593	0.0060028	Ankzf1
ENSMUSG00000091697	453.3323545	-0.382921067	0.114883621	-3.333121503	0.000858774	0.006012579	Eif3s6-ps2
ENSMUSG00000074781	298.1954793	-0.514653688	0.154443035	-3.332320475	0.00086125	0.006027203	Ube2n
ENSMUSG00000036528	415.0393245	-0.359758301	0.107965724	-3.332152911	0.000861769	0.006028124	Pfifbp2
ENSMUSG00000104394	106.11662	-0.806253333	0.242119509	-3.329980866	0.00086852	0.006069891	Gm37254
ENSMUSG00000029541	118.9334892	-0.62408712	0.187651191	-3.325782888	0.000881706	0.006151004	Cyp2w1
ENSMUSG00000079164	48.74812822	-0.875324599	0.263206137	-3.325623825	0.000882209	0.006151759	Tlr5
ENSMUSG00000001158	438.101808	-0.443599043	0.133394853	-3.325458461	0.000882733	0.006152654	Snmp27
ENSMUSG00000026356	1882.035768	-0.356522247	0.107348807	-3.321157064	0.000896451	0.006237835	Dars
ENSMUSG00000083305	147.9201752	-0.542974163	0.163491071	-3.321124266	0.000896556	0.006237835	Gm13315
ENSMUSG00000044080	200.0842912	-0.473569513	0.142676602	-3.31918133	0.000902818	0.006278596	S100a1
ENSMUSG00000026469	1783.444266	-0.51127449	0.154085515	-3.318121688	0.00090625	0.006299651	Xpr1
ENSMUSG00000031783	248.5550448	-0.427426817	0.128856189	-3.317084098	0.000909622	0.006318401	Pofr2c
ENSMUSG00000089774	279.9127357	-0.526164264	0.158626514	-3.317000736	0.000909894	0.006318401	Slc5a3
ENSMUSG00000028149	1198.404144	-0.279854837	0.08437951	-3.316620798	0.000911132	0.006322297	Atp1gds1
ENSMUSG00000043822	373.8652438	-0.439744378	0.132658245	-3.314866552	0.000916869	0.006359272	Adamts15
ENSMUSG00000073198	132.204842	-0.596826232	0.180110377	-3.313669326	0.000920803	0.006378038	Bnip3l-ps
ENSMUSG00000021779	555.2305127	-0.37471025	0.113086474	-3.313484251	0.000921413	0.006379423	Thrb
ENSMUSG00000028830	1956.609172	-0.276088349	0.083345606	-3.312572353	0.000924422	0.00639457	AU040320
ENSMUSG00000053253	1481.884371	-0.338855277	0.102293415	-3.312581546	0.000924392	0.00639457	Ndfip2
ENSMUSG00000038298	27.30388855	-1.669417203	0.504149701	-3.311352161	0.000928463	0.00641682	Pdzk1
ENSMUSG00000031007	2156.127979	-0.301027164	0.090921569	-3.310844362	0.000930149	0.006422773	Atp6ap2
ENSMUSG00000089862	244.7484805	-0.519620114	0.157006159	-3.309552414	0.000934453	0.006445706	Umad1
ENSMUSG00000037110	1804.726184	-0.50093519	0.151433079	-3.307964113	0.000939769	0.006474839	Ralgap2
ENSMUSG00000026385	11247.411778	-0.227055149	0.068666321	-3.306645038	0.000944205	0.006496778	Dbi
ENSMUSG00000026878	2538.254171	-0.334276134	0.101153248	-3.304650528	0.000950949	0.00653773	Rab14
ENSMUSG00000035840	474.7516745	-0.490536653	0.148478395	-3.30375779	0.000953982	0.006552473	Lysmd3
ENSMUSG00000038212	1352.208351	-0.392728833	0.118879663	-3.303582992	0.000954577	0.006553668	Pfmsd14b
ENSMUSG00000021337	45.85890006	-0.923443266	0.279646865	-3.302176358	0.000959377	0.006580821	Scgn
ENSMUSG00000025085	389.5468349	-0.400622264	0.121331742	-3.301875139	0.000960408	0.006584991	Abilim1
ENSMUSG00000031231	2765.645971	-0.264451261	0.080141019	-3.299824025	0.000967455	0.006627469	Cox7b
ENSMUSG00000024579	341.410014	-0.541741757	0.164243338	-3.298409332	0.000972343	0.006655099	Pcyox11
ENSMUSG00000000171	6256.068991	-0.273296056	0.082883913	-3.297335335	0.000976069	0.006677666	Sdhb
ENSMUSG00000025959	566.0004226	-0.421294142	0.127839849	-3.295483716	0.000982524	0.006718876	Klf7
ENSMUSG00000028745	2713.138207	-0.245891645	0.074632764	-3.294687629	0.000985311	0.006732025	Capz3
ENSMUSG00000056770	1015.620059	-0.300838287	0.091307161	-3.294794027	0.000984938	0.006732025	Setd3
ENSMUSG00000022364	434.428153	-0.35653774	0.108227303	-3.294341911	0.000986524	0.006737355	Tbc1d31
ENSMUSG00000069520	685.4647208	-0.315945626	0.095919276	-3.293870009	0.000988182	0.006745717	Tmem19
ENSMUSG00000038286	425.2281428	-0.36721722	0.111553347	-3.291852997	0.000995296	0.00678833	Bphl
ENSMUSG00000069539	1244.939809	-0.31778812	0.096549975	-3.291436576	0.000996771	0.006795411	Scyl2
ENSMUSG00000021222	240.3863726	-0.45280374	0.137596015	-3.290820151	0.000998958	0.006807338	Dcaf4
ENSMUSG00000021097	1264.585803	-0.284434427	0.086437318	-3.29064384	0.000999584	0.006808626	Clnn
ENSMUSG00000039217	86.12942989	-1.08091612	0.328729555	-3.288162273	0.001008437	0.006859927	Il18
ENSMUSG00000046994	808.5187917	-0.373491998	0.113596935	-3.287870382	0.001009483	0.006864004	Mars2
ENSMUSG00000041594	354.6713404	-0.400624899	0.121978117	-3.284399756	0.001021998	0.006934004	Tmtc4
ENSMUSG00000021124	919.8513046	-0.315094387	0.095971011	-3.283224645	0.001026268	0.006956422	Vti1b
ENSMUSG00000038563	826.9371125	-0.311792558	0.094968319	-3.283121799	0.001026643	0.006956422	Efl1
ENSMUSG00000028035	344.0216755	-0.518797313	0.158031335	-3.282876225	0.001027538	0.006959456	Dnajb4
ENSMUSG00000007739	5568.283082	-0.229047247	0.069791201	-3.281892898	0.001031128	0.006980314	Cct4
ENSMUSG00000021112	1046.219914	-0.542458008	0.165298739	-3.281682683	0.001031897	0.006980314	Mpp5
ENSMUSG00000041720	1017.34911	-0.292876337	0.089250527	-3.281508191	0.001032535	0.006980314	Pi4Ka
ENSMUSG00000029162	2526.821695	-0.353030345	0.107607455	-3.280723854	0.001035411	0.006991491	Khk
ENSMUSG00000026259	621.0297026	-0.328558613	0.100163004	-3.280239218	0.001037191	0.006996421	Ngef
ENSMUSG00000020260	427.5469837	-0.393564136	0.120047588	-3.278401042	0.00104397	0.007037078	Pofut2
ENSMUSG00000056531	189.3758481	-0.635806989	0.193991423	-3.277500521	0.001047305	0.007053457	Ccdc18
ENSMUSG00000028879	1479.893135	-0.413370126	0.126177963	-3.276088138	0.001052557	0.007085761	Stx12
ENSMUSG00000049940	2416.17841	-0.279659011	0.085397489	-3.274791973	0.001057398	0.007115275	Pgm2
ENSMUSG00000030397	323.1766352	-0.42291068	0.129156404	-3.274407348	0.001058839	0.007118815	Mark4
ENSMUSG00000045038	319.7391987	-0.478570377	0.146152759	-3.274453257	0.001058667	0.007118815	Prkce
ENSMUSG00000022295	771.1988842	-0.329235807	0.10055942	-3.274453257	0.001060207	0.007124938	Atp6v1c1

ENSMUSG00000035504	2969.637773	-0.361952371	0.110633529	-3.271633606	0.001069281	0.007176624	Reep6
ENSMUSG00000049659	1298.314128	-0.321105625	0.098201478	-3.268214995	0.001075986	0.007218519	Aftph
ENSMUSG00000023892	270.2535401	-0.623251046	0.190700748	-3.268214995	0.001082281	0.007254499	Zfp51
ENSMUSG00000032580	1066.430372	-0.300084057	0.091842628	-3.267372272	0.001085508	0.007270977	Rbm5
ENSMUSG00000020803	1959.280489	-0.273098793	0.083604829	-3.266543277	0.001088692	0.007288056	Txndc17
ENSMUSG00000060739	682.5852186	-0.400474774	0.122625826	-3.265827341	0.001091448	0.007303366	Nsa2
ENSMUSG00000058587	2455.081347	-0.319351047	0.097860682	-3.263323327	0.001101138	0.007352411	Tmod3
ENSMUSG00000035151	465.0220871	-0.497107931	0.152361002	-3.262697959	0.001103571	0.007365495	Elmod2
ENSMUSG00000031711	470.3715168	-0.391062725	0.119930998	-3.260731025	0.0011111254	0.007410422	Zfp330
ENSMUSG00000020661	1034.994463	-0.296520149	0.090946683	-3.260373422	0.001112656	0.007416596	Dnm3a
ENSMUSG00000019888	27.63026523	-1.194327308	0.366408664	-3.259549859	0.001115892	0.007425448	Mgat4c
ENSMUSG00000030718	787.8514993	-0.305689405	0.093777628	-3.259726353	0.001115198	0.007425448	Ppme1
ENSMUSG00000031660	1148.916183	-0.379856593	0.116532869	-3.25965193	0.00111549	0.007425448	Brd7
ENSMUSG00000035557	21.75885473	-1.942740607	0.596004569	-3.259606902	0.001115667	0.007425448	Krt17
ENSMUSG00000055200	186.8296462	-0.490338256	0.150494017	-3.258191019	0.001121249	0.007451545	Sertad3
ENSMUSG00000057933	301.8409951	-0.530852967	0.162945819	-3.257849566	0.001122599	0.007457333	Gta2
ENSMUSG00000021216	370.1882613	-0.554465684	0.170223027	-3.25728953	0.001124816	0.007465693	Tubal3
ENSMUSG00000047635	158.8881327	-0.507650158	0.155900492	-3.256244746	0.001128964	0.007486839	2810006K23Rik
ENSMUSG000000106558	178.4936781	-0.589020398	0.181179271	-3.251036355	0.001149852	0.007609154	Gm5552
ENSMUSG00000032066	235.8504824	-0.666389008	0.205023073	-3.250312263	0.001152784	0.007625315	Bco2
ENSMUSG00000030869	365.6478288	-0.395509274	0.121757215	-3.248343644	0.00116079	0.007668502	Ndufab1
ENSMUSG00000027624	142.8830112	-0.588912101	0.181550234	-3.243796984	0.001179478	0.007774978	Epb41l1
ENSMUSG00000067369	782.6931478	-0.453143909	0.139735406	-3.242871082	0.001183317	0.007794177	Trmt2b
ENSMUSG00000039682	2350.31079	-0.288388548	0.088987156	-3.240788478	0.001191996	0.007838078	Lap3
ENSMUSG00000026239	265.582718	-0.443079678	0.13677652	-3.239442537	0.001197636	0.007868519	Pta6d
ENSMUSG00000037826	108.6869577	-0.701807565	0.216669877	-3.239063847	0.001199227	0.007875651	Ppm1k
ENSMUSG00000036737	1438.92358	-0.27565925	0.085131494	-3.238040795	0.001203536	0.007883996	Oxsr1
ENSMUSG00000056035	4614.420028	-0.584374434	0.180470306	-3.238064181	0.001203437	0.007883996	Cyp3a11
ENSMUSG00000027475	884.3982657	-0.388190336	0.119897626	-3.23768158	0.001205052	0.007890609	Kif3b
ENSMUSG00000019883	1652.119195	-0.437539569	0.13515979	-3.237202187	0.001207079	0.007897235	Echdc1
ENSMUSG00000028480	134.6092398	-0.666986043	0.206037454	-3.237207748	0.001207055	0.007897235	Glipr2
ENSMUSG00000022964	419.5728357	-0.431443208	0.133338995	-3.235686674	0.001213505	0.007935946	Tmem50b
ENSMUSG00000031438	4772.600733	-0.331563147	0.102508105	-3.234506637	0.001218531	0.007965468	Rnf128
ENSMUSG00000049233	194.3171629	-0.579493247	0.179193954	-3.233888385	0.001221172	0.007979381	Apoo-ps
ENSMUSG00000028093	694.5569128	-0.316696571	0.097963462	-3.232802981	0.001225821	0.008006399	Acw6
ENSMUSG00000037108	25.49837501	-1.20253586	0.372260266	-3.23036319	0.001236331	0.008062342	Zcwpw1
ENSMUSG00000047428	14.10312918	-1.646134973	0.510291272	-3.225873265	0.00125589	0.008178777	Dlk2
ENSMUSG00000055447	1112.116833	-0.310533419	0.096283591	-3.225195633	0.001258866	0.008194734	Cd47
ENSMUSG00000035118	624.541188	-0.31711209	0.098374407	-3.223522262	0.001266245	0.008228746	Dusp3
ENSMUSG00000027761	2260.710848	-0.489924153	0.151989318	-3.22341175	0.001266733	0.008228746	Aadac
ENSMUSG00000053559	672.7017624	-0.312067475	0.096832303	-3.222762102	0.00126961	0.008240554	Smagp
ENSMUSG000000505674	617.5146198	-0.3247969	0.100798658	-3.222343461	0.00127195	0.008248872	Tomn40l
ENSMUSG00000021796	3657.617748	-0.459899186	0.14282053	-3.220119592	0.001281371	0.008303051	Bmpr1a
ENSMUSG000000110237	45.32180855	-1.231814483	0.382534053	-3.220143337	0.001281265	0.008303051	Gm18258
ENSMUSG00000024730	135.7939822	-0.560611432	0.174208781	-3.21804349	0.001290682	0.008356431	Ms4a8a
ENSMUSG00000054676	326.1147192	-0.370235871	0.115045839	-3.218159604	0.00129016	0.008356431	1600014C10Rik
ENSMUSG00000068798	312.4939946	-0.500598893	0.155570273	-3.217831291	0.001291638	0.00835914	Rap1a
ENSMUSG00000052595	407.0402152	-0.523606381	0.162737309	-3.217494398	0.001293156	0.008362012	A1cf
ENSMUSG00000022075	309.5031982	-0.424660432	0.132005352	-3.216994061	0.001295413	0.008372363	Rhobtb2
ENSMUSG00000047554	329.40582	-0.409185784	0.127264415	-3.215241141	0.00130335	0.008417445	Tmem41b
ENSMUSG000000554150	42.1179057	-1.022771941	0.318134248	-3.214906753	0.001304869	0.008423763	Syne3
ENSMUSG00000057497	1224.65904	-0.312703145	0.097285085	-3.214296871	0.001307644	0.008434683	Fam136a
ENSMUSG00000045576	460.8228535	-0.339412358	0.105625515	-3.21335576	0.001311937	0.008455367	Stf7
ENSMUSG00000039461	212.6245932	-0.490921306	0.152876301	-3.21123224	0.001321671	0.008514578	Tcta
ENSMUSG00000079414	73.14045542	-0.706041245	0.21999091	-3.209410996	0.001330072	0.008554545	Gm11110
ENSMUSG00000035334	1452.027683	-0.345578985	0.10769198	-3.208957465	0.001332172	0.008564513	Ddr1
ENSMUSG00000026834	80.86732534	-0.781236663	0.243530816	-3.207958137	0.00133681	0.008590781	Acvr1c
ENSMUSG00000027801	2088.735114	-0.271463827	0.084702143	-3.20492276	0.001350987	0.008671155	Tm4sf4
ENSMUSG00000050856	1020.385452	-0.390632803	0.122023843	-3.201282583	0.001368173	0.008770613	Atp5k
ENSMUSG00000002228	142.095966	-0.540613359	0.168887215	-3.201031884	0.001369364	0.008771521	Ppm1j
ENSMUSG00000026142	743.9252522	-0.310432407	0.09699276	-3.200572979	0.001371546	0.008777784	Rhdbd1
ENSMUSG00000044475	488.8495241	-0.403897448	0.126191854	-3.20066181	0.001371124	0.008777784	Ascc1
ENSMUSG00000021959	21.27921885	-1.327028017	0.414884638	-3.198547007	0.00138122	0.008832435	Lats2
ENSMUSG00000032745	1703.9381	-0.414992601	0.129769172	-3.197929024	0.001384183	0.008847751	Gpbb1
ENSMUSG00000035852	2522.932842	-0.244993405	0.076618749	-3.197564675	0.001385933	0.0088553	Misp
ENSMUSG00000019975	209.7108763	-0.54931902	0.171826355	-3.196942749	0.001388925	0.008870775	Ikbp
ENSMUSG00000095026	264.7709415	-0.633152324	0.198104672	-3.196049427	0.001393232	0.00888735	Gm3336
ENSMUSG00000038014	7682.454194	-0.211078232	0.066055498	-3.195468033	0.001396042	0.00889151	Fam120a
ENSMUSG00000052407	51.97409723	-0.830402707	0.259871003	-3.195441962	0.001396169	0.00889151	Ccdc171
ENSMUSG00000036214	130.550513	-0.703212283	0.220137533	-3.194422473	0.001401109	0.008912038	Znrd1as
ENSMUSG00000018995	317.8410137	-0.377702439	0.118244749	-3.194242812	0.001401981	0.008913946	Nars2
ENSMUSG00000026994	741.4626657	-0.366470226	0.114766745	-3.193174339	0.00140718	0.008939696	Galnt3
ENSMUSG00000083200	901.8134351	-0.350485775	0.109869718	-3.190012508	0.001422666	0.009019682	Gm15066
ENSMUSG00000046364	766.9220897	-0.310618068	0.097377582	-3.189831404	0.001423558	0.009021662	Rpl27a
ENSMUSG00000027108	2003.574279	-0.35765831	0.112154043	-3.188991675	0.0014277	0.009044229	Ola1
ENSMUSG00000034981	1017.161663	-0.447172452	0.142035933	-3.187404645	0.001435558	0.009086614	Parm1
ENSMUSG00000038893	129.8934536	-0.590235779	0.185304255	-3.185225174	0.001446414	0.009144614	Fam117a
ENSMUSG00000048707	973.449382	-0.371558171	0.116686934	-3.184231149	0.001451391	0.009169293	Tprn
ENSMUSG00000042496	335.3838777	-0.374439239	0.117746991	-3.180032346	0.001472586	0.009279498	Prdm10
ENSMUSG00000021264	2046.488542	-0.237968687	0.074839384	-3.179725338	0.001474147	0.009285576	Yy1
ENSMUSG00000047638	312.575088	-0.507432415	0.15961471	-3.179108077	0.00147729	0.009297851	Nr1h4
ENSMUSG00000028771	457.414149	-0.392301828	0.123416912	-3.178671557	0.001479516	0.009308101	Ptn12
ENSMUSG000000106078	28.96943359	-1.105541296	0.347907992	-3.177682959	0.00148457	0.009328587	Gp3697
ENSMUSG00000031490	982.8192272	-0.609379238	0.191962195	-3.174475246	0.001501077	0.009428507	Eif4ebp1
ENSMUSG00000032757	481.295898	-0.387467095	0.122067895	-3.174193303	0.001502536	0.009433865	Bcl1
ENSMUSG00000049624	550.4130783	-0.431065377	0.135852765	-3.173033521	0.001508551	0.009467228	Scl17a5
ENSMUSG00000035473	1979.495124	-0.265569505	0.083717479	-3.172210955	0.001512831	0.009477955	Galm
ENSMUSG00000039989	431.4600231	-0.351713301	0.110798867	-3.172021319	0.001513819	0.009477955	Cbx4
ENSMUSG00000019302	702.7333753	-0.323627162	0.102073534	-3.170529615	0.001521613	0.009522422	Atp6v0a1
ENSMUSG00000032777	1555.465966	-0.254697202	0.080377809	-3.168750268	0.001530959	0.009566035	Gtf3c1
ENSMUSG00000026004	149.0147846	-0.567714508	0.179198211	-3.168081347	0.001534486	0.009580384	Kansl1l
ENSMUSG00000026698	355.9019236	-0.375002928	0.118450531	-3.16740221	0.001546022	0.009639099	Pigc

ENSMUSG00000034602	1167.004563	-0.260152558	0.08217493	-3.165838491	0.001546366	0.009639099	Mon2
ENSMUSG00000022329	348.3080121	-0.381584639	0.120660992	-3.165838491	0.001564463	0.009744103	Stk3
ENSMUSG00000026149	3453.147433	-0.391858116	0.123946297	-3.161515305	0.001569506	0.009771601	Tm4sf20
ENSMUSG000000113862	121.6024611	-0.565745779	0.178985324	-3.160850098	0.001573094	0.009790029	Gm3537
ENSMUSG000000041773	500.1619428	-0.391700017	0.124032906	-3.158033066	0.001588375	0.009877234	Enc1
ENSMUSG00000029859	494.8089335	-0.351708484	0.111411323	-3.156846855	0.001594851	0.009909586	Epha1
ENSMUSG000000027673	1987.996302	-0.254166124	0.080645693	-3.151639152	0.001623568	0.010065467	Ndufb5
ENSMUSG000000040848	4076.206309	-0.253449646	0.080419501	-3.15159434	0.001623817	0.010065467	Sft2d2
ENSMUSG000000071506	69.07559585	-0.690669334	0.219253912	-3.150088993	0.001632207	0.010105408	Tmem139
ENSMUSG000000021555	660.0507058	-0.341790094	0.108524325	-3.149433029	0.001635876	0.010124096	Naa35
ENSMUSG000000018846	4660.648841	-0.471939445	0.149868795	-3.149017422	0.001638204	0.010130452	Pank3
ENSMUSG000000028456	1302.251142	-0.275056885	0.087346311	-3.149038366	0.001638087	0.010130452	Unc13b
ENSMUSG000000038393	9662.539719	-0.237934442	0.075566224	-3.148687731	0.001640053	0.010137861	Txnip
ENSMUSG000000025766	176.39288	-0.646712371	0.20540662	-3.14844951	0.001641391	0.010142101	D3Erd751e
ENSMUSG000000038671	425.7158311	-0.347164866	0.110272986	-3.148231293	0.001642617	0.01014565	Arfp1
ENSMUSG000000032802	1214.23985	-0.462753571	0.147195291	-3.143806897	0.001667654	0.010279998	Srrn1
ENSMUSG000000032504	3865.519312	-0.221904487	0.070599508	-3.143144942	0.001671431	0.010290963	Pdc6ip
ENSMUSG000000057265	36.07198558	-1.211284619	0.385371519	-3.143160715	0.001671134	0.010290963	Bbaf1
ENSMUSG000000029422	860.7249062	-0.364838261	0.116149904	-3.141098249	0.001683156	0.010342705	Rsrc2
ENSMUSG000000059456	443.6358033	-0.35541094	0.113254828	-3.138152669	0.001700163	0.01042664	Ptk2b
ENSMUSG000000030016	977.1536053	-0.46585535	0.148523966	-3.136566853	0.001709385	0.010479066	Zfp638
ENSMUSG0000000105283	57.30383599	-0.810105076	0.258311455	-3.13615622	0.001711178	0.01048961	Gm33370
ENSMUSG000000044364	12.69388404	-1.731380121	0.552182621	-3.135520849	0.001715492	0.010508234	Tmem74b
ENSMUSG000000049421	930.0512982	-0.527957425	0.168441581	-3.134365168	0.001722264	0.010545564	Zfp260
ENSMUSG0000000328128	280.7400016	-0.453408916	0.144672888	-3.134028229	0.001724243	0.010553531	F3
ENSMUSG000000026014	824.0737701	-0.405860865	0.129519396	-3.133591404	0.001726811	0.0105651	Raph1
ENSMUSG000000025393	33845.80638	-0.213263287	0.068078776	-3.132595811	0.001732679	0.010596834	At5b
ENSMUSG000000042682	453.4841485	-0.374743516	0.119709311	-3.130445838	0.001745412	0.010666329	Selenok
ENSMUSG000000029227	1138.234048	-0.326961914	0.104475216	-3.129564374	0.001750657	0.010692849	Plp11
ENSMUSG000000032369	683.3624395	-0.305942387	0.097776883	-3.128984857	0.001754113	0.010705042	Fisrc1
ENSMUSG000000055239	1186.933054	-0.271929138	0.086948693	-3.127466637	0.001763198	0.010751155	Kcmf1
ENSMUSG000000020986	1678.16953	-0.367759611	0.117680226	-3.126988837	0.001766066	0.010758771	Csc23a
ENSMUSG000000029385	208.1323145	-0.466343099	0.149134703	-3.126992515	0.001766044	0.010758771	Scng2
ENSMUSG000000022200	2484.358672	-0.226338139	0.072415125	-3.125564424	0.001774642	0.010794121	Golph3
ENSMUSG000000001289	935.5681905	-0.297567676	0.095210781	-3.125356939	0.001775894	0.01079752	Pldn5
ENSMUSG000000021764	1207.425942	-0.328666192	0.105354379	-3.119625344	0.001810812	0.010966999	Nduf4
ENSMUSG000000041237	7115.416002	-0.297157067	0.095250191	-3.11975298	0.001810028	0.010966999	Pklr
ENSMUSG000000052406	652.8732853	-0.346704605	0.111136584	-3.119626266	0.001810806	0.010966999	Rexo4
ENSMUSG000000096544	1663.734685	-0.398420251	0.127781989	-3.117968767	0.001821021	0.011020256	Gm3617
ENSMUSG000000025525	469.4990367	-0.398044112	0.127674829	-3.117639672	0.001823055	0.011023998	Apool
ENSMUSG000000081272	605.4030004	-0.346209771	0.111121417	-3.115598973	0.001835717	0.01109195	Gm13509
ENSMUSG0000000102914	251.5054586	-0.396935617	0.127409396	-3.115434424	0.001836742	0.011093835	Gm35106
ENSMUSG000000049076	1187.551085	-0.405525744	0.130247519	-3.113500726	0.001848821	0.01115381	Acap2
ENSMUSG000000039163	379.953358	-0.391116958	0.12568678	-3.111838489	0.001859262	0.011203802	Cmc1
ENSMUSG000000052928	156.9264476	-0.51168173	0.164550065	-3.109580854	0.00187353	0.011276666	Ctif
ENSMUSG000000075054	229.9350342	-0.560939424	0.180401788	-3.109389496	0.001874744	0.011279613	Yae1d1
ENSMUSG000000024527	2156.072126	-0.238830605	0.076842329	-3.108060474	0.001883195	0.011317342	Alg3l2
ENSMUSG000000022336	2000.224766	-0.332934084	0.107149401	-3.107195002	0.001888718	0.011337403	Eif3e
ENSMUSG000000040430	125.6643009	-0.529137303	0.170306201	-3.106976136	0.001890117	0.011341428	Pitpnc1
ENSMUSG0000000102135	29.72860566	-1.055124769	0.339624951	-3.106735139	0.001891658	0.011346305	Gm37108
ENSMUSG000000038497	278.4106157	-0.42973125	0.138355326	-3.105997161	0.001896385	0.01135716	Tmc3
ENSMUSG000000036188	554.0601102	-0.325512143	0.104831338	-3.105103392	0.001902125	0.011376921	Ankmy2
ENSMUSG000000040616	822.7859321	-0.324929897	0.10465018	-3.10491484	0.001903338	0.011376921	Tmem51
ENSMUSG000000009894	422.3529754	-0.335807352	0.108209025	-3.103321105	0.001913619	0.011429597	Snap47
ENSMUSG000000082743	697.2376425	-0.591687807	0.190693242	-3.102825249	0.001916828	0.011439987	Gm12988
ENSMUSG000000107921	83.23382073	-0.63185031	0.203663072	-3.102429438	0.001919393	0.011450907	Gm6423
ENSMUSG000000031217	1278.35709	-0.40631625	0.130977461	-3.102184502	0.001920982	0.011455997	Enfb1
ENSMUSG000000042599	557.6767049	-0.497452447	0.160627287	-3.096936125	0.00195532	0.01164294	Kdm7a
ENSMUSG000000029999	621.993029	-0.339053955	0.109491076	-3.096635523	0.001957304	0.011650297	Tgfa
ENSMUSG000000066894	531.3935485	-0.322050258	0.104029379	-3.095762583	0.001963075	0.011678382	Vsig10
ENSMUSG000000025357	137.025198	-0.507890879	0.164082836	-3.095332156	0.001965926	0.011688215	Dgka
ENSMUSG000000035678	61.44228819	-0.757193901	0.244815737	-3.092913513	0.001982019	0.011774901	Tnfsf9
ENSMUSG000000018189	769.543592	-0.428883426	0.138687827	-3.092437416	0.001985201	0.011783311	Uchl5
ENSMUSG000000026879	800.5961631	-0.296602858	0.095912125	-3.092443815	0.001985158	0.011783311	Gsn
ENSMUSG000000030393	7.807237782	-2.561628704	0.828461412	-3.092031406	0.001987918	0.011788846	Zik1
ENSMUSG000000035958	760.2575019	-0.425953604	0.137765087	-3.09188353	0.001988909	0.011788846	Tdp2
ENSMUSG000000038170	1288.757986	-0.313548042	0.101406724	-3.091984718	0.001988231	0.011788846	Pde4dip
ENSMUSG000000026349	743.8020803	-0.337731623	0.109266262	-3.090904878	0.001995475	0.011818771	Cnt2
ENSMUSG000000034560	747.1875417	-0.485202041	0.156975695	-3.090937374	0.001995257	0.011818771	Washc4
ENSMUSG000000024608	5804.416097	-0.300392977	0.097284211	-3.087787573	0.002016526	0.011925302	Rps14
ENSMUSG000000003847	846.2371876	-0.479830332	0.155410757	-3.087497558	0.002018494	0.011928971	Nfat5
ENSMUSG000000048218	34.42176242	-1.012998493	0.328201994	-3.086509255	0.002025216	0.01195853	Amigo2
ENSMUSG000000047187	1767.481206	-0.292045794	0.094732972	-3.082831557	0.002050412	0.012088967	Rab2a
ENSMUSG0000000102163	368.577335	-0.485752763	0.15759663	-3.082253499	0.002054398	0.012107885	Gm36945
ENSMUSG000000039670	132.517871	-0.580293269	0.188300354	-3.081742846	0.002057925	0.012124085	Oxld1
ENSMUSG000000051255	889.6396471	-0.460043265	0.149401751	-3.079236089	0.002075321	0.01221271	Gm5653
ENSMUSG000000028719	2338.478144	-0.350106139	0.113771916	-3.077263268	0.002089107	0.012284549	Cmpk1
ENSMUSG000000006418	1166.461788	-0.283568522	0.092191685	-3.075857887	0.002098979	0.012328629	Rnf114
ENSMUSG000000036019	289.5129083	-0.416718469	0.135478098	-3.075910232	0.00209861	0.012328629	Tmtc2
ENSMUSG000000068226	116.2900435	-0.567844257	0.184784738	-3.073004093	0.002119156	0.012436451	Ces2f
ENSMUSG000000007891	2248.121947	-0.370277329	0.120598823	-3.070322917	0.002138274	0.012540517	Ctsd
ENSMUSG000000047866	1077.881365	-0.284555819	0.092758846	-3.067694672	0.002157169	0.012641806	Lomp2
ENSMUSG000000033557	3792.885687	-0.281229673	0.091716309	-3.066299495	0.002167261	0.012696171	Fam20b
ENSMUSG000000019872	415.1051684	-0.491787134	0.160415085	-3.065716264	0.002171493	0.01271241	Smpd13a
ENSMUSG000000046516	128.7405093	-0.620335906	0.202347731	-3.065692422	0.002171666	0.01271241	Cox17
ENSMUSG000000073639	1918.059286	-0.384333895	0.125416816	-3.064452647	0.002180687	0.012750836	Rab18
ENSMUSG000000057156	238.1785781	-0.459319287	0.149938124	-3.063392248	0.00218843	0.012786508	Homez
ENSMUSG000000044751	983.9424242	-0.296646398	0.096973621	-3.059042182	0.002220459	0.012954202	Gm12231
ENSMUSG000000030341	1116.409552	-0.255028766	0.083395193	-3.058075143	0.002227637	0.012986349	Tnfrsf1a
ENSMUSG000000031644	585.0560449	-0.516072303	0.168799819	-3.05730365	0.002233379	0.01301495	Nek1
ENSMUSG000000034765	320.2442995	-0.360459787	0.117963508	-3.055688954	0.002245441	0.013074622	Dusp5
ENSMUSG000000040354	1741.998416	-0.276718383	0.090561186	-3.055688954	0.002246138	0.013074622	Mars



ENSMUSG00000038967	619.7190245	-0.336100586	0.110027774	-3.054688601	0.002252943	0.013109334	Pdk2
ENSMUSG00000021365	1075.219032	-0.327931469	0.107406357	-3.052074432	0.002264264	0.013160451	Nedd9
ENSMUSG00000040097	357.7657112	-0.429229985	0.140635491	-3.052074432	0.002272657	0.013204309	Flywch1
ENSMUSG00000043782	201.797239	-0.425148682	0.139310573	-3.051804851	0.002274699	0.013206317	Bicld2
ENSMUSG000000113506	9.150341458	-2.438356717	0.798986313	-3.051812875	0.002274639	0.013206317	AC166358.6
ENSMUSG000000071533	540.2934057	-0.334119351	0.109492313	-3.051532504	0.002276764	0.013213377	Pcpn
ENSMUSG000000041408	4964.005485	-0.487563248	0.159797905	-3.05112415	0.002279863	0.013224918	Wapl
ENSMUSG000000045767	1843.877181	-0.312295318	0.102356781	-3.051046677	0.002280451	0.013224918	B230219D22Rik
ENSMUSG000000044881	220.0672692	-0.431406811	0.141412524	-3.050697335	0.002283106	0.013231874	Coa4
ENSMUSG000000053216	24.43427002	-1.171650973	0.384115454	-3.050257313	0.002286454	0.01324493	Btn2a2
ENSMUSG000000046159	464.9646317	-0.398744159	0.130761346	-3.049403904	0.00229296	0.013259752	Chrm3
ENSMUSG000000056043	14.08653838	-1.726649553	0.566199997	-3.049540023	0.002291921	0.013259752	Rgs9bp
ENSMUSG000000070730	587.832352	-0.302406807	0.099204696	-3.048311412	0.002301313	0.013296381	Rmdn3
ENSMUSG00000001833	1624.680559	-0.44826811	0.147119484	-3.046966295	0.002311636	0.013350097	Sept7
ENSMUSG000000030469	262.3577075	-0.522424123	0.171500835	-3.046189977	0.002317613	0.013375671	Zfp719
ENSMUSG000000075028	90.18138387	-0.659205866	0.216434106	-3.045757796	0.002320947	0.013389947	Pdrn11
ENSMUSG000000059475	304.723887	-0.487926382	0.160249927	-3.044783795	0.002328476	0.013427901	Zfp426
ENSMUSG000000018363	1046.72448	-0.317251712	0.104213664	-3.044242947	0.002332667	0.013442618	Smurf2
ENSMUSG000000005663	3511.412342	-0.309757734	0.101767915	-3.043766128	0.002336367	0.013456192	Actl5
ENSMUSG000000049690	98.95686226	-0.580586775	0.19074928	-3.043716738	0.00233675	0.013456192	Nckap5
ENSMUSG000000021832	1914.934413	-0.31419862	0.10323644	-3.043485622	0.002338546	0.013461554	Psmc6
ENSMUSG000000080776	2595.585519	-0.307775732	0.101158929	-3.042496944	0.002346242	0.013495875	Gm12174
ENSMUSG000000079641	1651.938982	-0.544639198	0.179170217	-3.039786443	0.00236746	0.013602846	Rpl39
ENSMUSG000000022750	762.8260944	-0.281964921	0.092762669	-3.039637879	0.002368628	0.013604537	Khlh2
ENSMUSG000000022774	485.0094334	-0.3720875	0.122453563	-3.038600838	0.002376795	0.013631338	Ncbp2
ENSMUSG000000035469	2235.101857	-0.272681176	0.089737514	-3.038653109	0.002376383	0.013631338	Rcbtb1
ENSMUSG000000022178	180.0498511	-0.448187985	0.147534269	-3.037856824	0.002382671	0.013660006	Actb
ENSMUSG000000021114	596.7896497	-0.357708727	0.11775478	-3.037742717	0.002383574	0.013660149	Atp6v1d
ENSMUSG000000026172	323.8100134	-0.363823121	0.119841632	-3.035865861	0.00239846	0.013740407	Bcs1l
ENSMUSG000000014763	681.2112153	-0.290831889	0.095811353	-3.035463738	0.002401661	0.013752087	Fam120b
ENSMUSG000000029263	446.4974025	-0.465160096	0.153245688	-3.035387838	0.002402266	0.013752087	Pigg
ENSMUSG000000063047	196.2765415	-0.482068575	0.15884379	-3.034859443	0.002406478	0.013771139	Zfp780b
ENSMUSG000000044197	30.74897809	-1.199733193	0.395489841	-3.033537321	0.002417048	0.013816394	Cpr146
ENSMUSG000000036390	450.6257971	-0.337162024	0.111156826	-3.03321025	0.00241967	0.01382123	Gadd45a
ENSMUSG000000026667	2553.302935	-0.410648628	0.135475177	-3.031172473	0.002436061	0.013908629	Uhmk1
ENSMUSG000000081277	948.4674568	-0.437881794	0.144483077	-3.030678777	0.002440047	0.013922305	Gm15285
ENSMUSG000000037622	967.4632536	-0.274762181	0.09067946	-3.030037675	0.002445232	0.013946781	Wdctc1
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ENSMUSG000000052428	996.4002772	-0.316586526	0.104639517	-3.025496829	0.00248225	0.014142377	Tmc01
ENSMUSG000000053886	969.5397741	-0.331986072	0.109738227	-3.025254563	0.002484239	0.014148534	Sh2d4a
ENSMUSG000000036782	28.88457037	-1.160964953	0.383774042	-3.025126312	0.002485293	0.01414936	Khlh13
ENSMUSG000000032549	32.38821554	-1.047076787	0.346215605	-3.024348912	0.002491689	0.014180588	Rab6
ENSMUSG000000040044	577.7206207	-0.529955615	0.175258142	-3.02385731	0.002495741	0.01419846	Orc3
ENSMUSG000000013997	799.0243677	-0.280056552	0.092657699	-3.022485507	0.002507081	0.014247356	Nit1
ENSMUSG000000016409	461.3964267	-0.435077397	0.144087212	-3.019542059	0.002531571	0.014370798	Nkap
ENSMUSG000000023007	215.3357592	-0.432299528	0.143229536	-3.018228932	0.002542568	0.014420564	Prpf40b
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ENSMUSG0000000112605	27.66739531	-1.378174708	0.456619519	-3.018212429	0.002542706	0.014420564	Fam7476
ENSMUSG000000097908	116.2160239	-0.619874735	0.20539162	-3.018013757	0.002544374	0.014422439	4933404O12Rik
ENSMUSG000000047022	148.389553	-0.53474195	0.177220855	-3.017375982	0.002549733	0.014442306	Mipol1
ENSMUSG000000060261	2242.625346	-0.272083168	0.090183315	-3.017001177	0.002552888	0.014454917	Gtf2i
ENSMUSG000000071203	593.0935956	-0.417235198	0.13831295	-3.016602548	0.002556247	0.014468676	Naip5
ENSMUSG000000103823	24.53527171	-1.153101609	0.382330928	-3.015977849	0.00256152	0.014486275	Gm7899
ENSMUSG000000085651	120.0955739	-0.518260776	0.171891177	-3.015051636	0.002569355	0.014521753	Gm11695
ENSMUSG000000020038	480.2280753	-0.341295501	0.113231146	-3.014148606	0.002577015	0.014554482	Cry1
ENSMUSG000000024132	693.168902	-0.331137019	0.109964151	-3.011317925	0.002601163	0.014669582	Eci1
ENSMUSG000000027893	5377.264584	-0.367255339	0.121998686	-3.010322095	0.002609708	0.01471244	Ahcy1l
ENSMUSG000000022359	185.2385815	-0.445513007	0.148002032	-3.010181688	0.002610915	0.014713916	Wdyh1
ENSMUSG000000033382	1193.412467	-0.335923467	0.111668659	-3.007731362	0.002632057	0.014811622	Trappc8
ENSMUSG000000036002	168.3539596	-0.476113653	0.158302833	-3.007612964	0.002633082	0.01481204	Fam214b
ENSMUSG000000095588	187.7186191	-0.438280184	0.145751048	-3.007046537	0.002637994	0.014834309	Gm12350
ENSMUSG000000021676	1754.981525	-0.378138303	0.125863858	-3.004343803	0.002661544	0.014955936	Iqgap2
ENSMUSG000000078439	5257.591902	-0.240664562	0.080110806	-3.004146074	0.002663274	0.014960261	Smim24
ENSMUSG000000029465	1860.845432	-0.260168964	0.08669372	-3.001012804	0.002690833	0.015082416	Arcp3
ENSMUSG000000061904	9152.472464	-0.261793747	0.087239017	-3.000879143	0.002692014	0.015083609	Sic25a3
ENSMUSG000000057440	483.5007862	-0.453430824	0.151219344	-2.998497492	0.002713144	0.015191069	Mpp7
ENSMUSG000000021636	644.8340329	-0.281037158	0.093853498	-2.994423899	0.002749636	0.015356739	Marveld2
ENSMUSG000000014402	422.388274	-0.352818137	0.117837838	-2.994098875	0.002752567	0.015362088	Tsg101
ENSMUSG000000028944	1084.583236	-0.32620384	0.108945492	-2.994193104	0.002751717	0.015362088	Plek2
ENSMUSG000000064346	36.41432933	-1.465823028	0.489943347	-2.991821477	0.002773184	0.015466062	mt-Tw
ENSMUSG000000035944	406.2014489	-0.376985104	0.126015364	-2.991580479	0.002775374	0.015472733	Ttc38
ENSMUSG000000027340	781.9796209	-0.390832419	0.130718348	-2.989881878	0.002790853	0.0155479	Sic23a2
ENSMUSG000000021118	344.172791	-0.355789556	0.119067224	-2.988140176	0.002806808	0.015614436	Plek2
ENSMUSG000000060260	350.3859866	-0.395268378	0.132276502	-2.988197996	0.002806277	0.015614436	Pwpp2b
ENSMUSG000000031791	53.74858807	-0.776561527	0.259915007	-2.987751783	0.002810377	0.015628707	Tmem38a
ENSMUSG000000024091	2595.084091	-0.227140681	0.076067854	-2.986027201	0.002826275	0.015701527	Vspa
ENSMUSG000000027534	101.6159156	-0.608700106	0.203872395	-2.98569164	0.002829378	0.015703673	Snx16
ENSMUSG000000094584	300.0738772	-0.394841715	0.132241766	-2.985756525	0.002828778	0.015703673	Ms4a18
ENSMUSG000000020988	759.9605772	-0.4075502	0.136516752	-2.98534938	0.002832546	0.015712709	L2hghd
ENSMUSG000000057522	1364.838071	-0.277269523	0.092904448	-2.984459081	0.002840802	0.015752894	Spod
ENSMUSG000000027809	1597.635826	-0.295489304	0.099031602	-2.983787968	0.00284704	0.015781865	Etfhd
ENSMUSG000000015405	2682.570565	-1.193603429	0.40006166	-2.983550151	0.002849253	0.015788514	Ace2
ENSMUSG000000060771	59.15336522	-0.894039907	0.296896966	-2.983218999	0.002852338	0.015799985	Tsga10
ENSMUSG000000045211	124.5904453	-0.529567536	0.177545562	-2.982713452	0.002857053	0.015820476	Nudt18
ENSMUSG000000016308	579.0505546	-0.29788704	0.099941892	-2.980602377	0.002876821	0.015912957	Ube2a
ENSMUSG000000081159	782.0472094	-0.36150649	0.121303838	-2.980173605	0.002880851	0.01592959	Gm6023
ENSMUSG000000042745	236.5652914	-0.608317784	0.204144708	-2.979836163	0.002884026	0.015941486	Id1
ENSMUSG000000038121	2011.364868	-0.334111017	0.112169255	-2.978632759	0.002895376	0.015998543	Fam210a
ENSMUSG000000007038	1215.8082	-0.283027877	0.09505072	-2.977448089	0.002906589	0.01604911	Neu1
ENSMUSG000000108615	969.0311081	-0.378997553	0.127455796	-2.97356076	0.002943661	0.016219302	Gm4973
ENSMUSG000000001768	718.6475075	-0.363198021	0.122171019	-2.97286552	0.002950336	0.016238841	Rin2
ENSMUSG000000036402	4361.911094	-0.424915437	0.143016237	-2.97091254	0.002967359	0.016320996	Gng12



ENSMUSG00000028138	2987.204978	-0.207183679	0.069749534	-2.970395192	0.002974169	0.016346905	Adh5
ENSMUSG000000113902	851.3841181	-0.270580724	0.091099955	-2.96639071	0.002976523	0.016354072	AC121965.1
ENSMUSG000000082274	252.4756302	-0.494797557	0.166801209	-2.96639071	0.003013174	0.016543772	Gm14026
ENSMUSG000000029664	148.3530952	-0.592488849	0.199801275	-2.965390735	0.003022987	0.01658011	Tfp12
ENSMUSG000000081661	725.0839139	-0.323630014	0.109154623	-2.964876843	0.003028041	0.016601983	Gm14450
ENSMUSG000000038365	620.436083	-0.283121474	0.095515888	-2.964129637	0.003035404	0.016636492	Fbxo25
ENSMUSG000000029811	758.3535467	-0.409185864	0.138051127	-2.964016821	0.003036517	0.016636736	Aoc1
ENSMUSG000000026858	650.1217257	-0.316005468	0.106688603	-2.961942123	0.003057052	0.016731586	Miga2
ENSMUSG000000040606	470.6689116	-0.380757251	0.128557805	-2.961759125	0.00305887	0.016735651	Kazn
ENSMUSG000000003309	1932.62011	-0.247994524	0.083812882	-2.95890703	0.003087322	0.016867612	Ap1m2
ENSMUSG000000020456	4720.939382	-0.207473519	0.070128448	-2.958478696	0.003091616	0.016880648	Ogdh
ENSMUSG000000026003	2401.834449	-0.366361751	0.123835593	-2.958452749	0.003091876	0.016880648	Acadl
ENSMUSG000000089782	2025.449114	-0.274309498	0.092734739	-2.95800152	0.003096406	0.016899452	Gm3531
ENSMUSG000000029735	746.9694964	-0.380935188	0.128797912	-2.957619291	0.003100248	0.016914491	Tpk1
ENSMUSG000000031953	636.2638179	-0.283084751	0.095724989	-2.957271165	0.00310375	0.01692767	Tmem170
ENSMUSG000000035199	1052.356783	-0.361390856	0.122217619	-2.956945631	0.003107029	0.016933689	Arl6ip5
ENSMUSG000000008475	2858.078472	-0.22549955	0.076310215	-2.95503753	0.00312631	0.017009006	Arcp5
ENSMUSG000000024276	1045.548812	-0.458340754	0.155184533	-2.953520849	0.003141714	0.017086841	Zfp397
ENSMUSG000000060803	749.0796709	-0.367790096	0.124602905	-2.951697612	0.003160323	0.017182047	Gstp1
ENSMUSG000000028436	882.112057	-0.285165174	0.096780655	-2.946510075	0.003213819	0.017454616	Dcaf12
ENSMUSG000000049775	7072.336667	-0.192985123	0.06550276	-2.946213614	0.003216902	0.017459175	Tmsb4x
ENSMUSG000000036099	367.8743936	-0.330685481	0.112254237	-2.945861915	0.003220561	0.017472948	Vezt
ENSMUSG000000032570	928.5062444	-0.317975818	0.107981178	-2.944733748	0.003232327	0.017518469	Atp2c1
ENSMUSG000000043716	5259.824546	-0.238515787	0.081025176	-2.943724385	0.003242887	0.017569585	Rpl17
ENSMUSG000000034687	492.7303867	-0.395647488	0.13444333	-2.942856955	0.003251986	0.01760481	Frax1
ENSMUSG000000046949	459.5509291	-0.40105571	0.136284574	-2.942781407	0.00325278	0.01760481	Nqo2
ENSMUSG000000021823	1648.516317	-0.269709894	0.0916756	-2.942003036	0.003260967	0.017642945	Vcl
ENSMUSG000000081755	10.63898476	-1.651144432	0.561372659	-2.941262648	0.003268772	0.017666802	Mup-ps23
ENSMUSG000000036371	9576.911388	-0.216443815	0.073604128	-2.940647785	0.003275267	0.017695762	Serbp1
ENSMUSG000000039648	380.3125937	-0.34798934	0.118354708	-2.940223897	0.003279752	0.017713844	Kyat1
ENSMUSG000000025354	872.0423337	-0.282085965	0.095973749	-2.939199182	0.003290615	0.017760198	Dnajc14
ENSMUSG000000048307	659.5274616	-0.331374847	0.112739307	-2.939301794	0.003289526	0.017760198	Ankrd46
ENSMUSG000000021361	1418.177296	-0.268576292	0.091454332	-2.93672574	0.003316973	0.01788386	Tmem14c
ENSMUSG000000020774	29.25652157	-1.206796794	0.411356703	-2.933699109	0.003349487	0.018015499	Aspa
ENSMUSG000000029397	745.7948885	-0.327293968	0.111577176	-2.93334157	0.003353347	0.018030032	Rchy1
ENSMUSG000000025630	2203.016627	-0.298680554	0.101852292	-2.932487305	0.003362587	0.018060999	Hprt
ENSMUSG000000024083	995.036216	-0.337634107	0.115213249	-2.930514591	0.003384011	0.018169805	Pja2
ENSMUSG000000029189	1467.171041	-0.235189889	0.080285859	-2.929406159	0.003396103	0.018228447	Sel113
ENSMUSG000000042444	966.7816151	-0.389185335	0.132914661	-2.928084325	0.003410575	0.018299817	Mindy2
ENSMUSG000000019826	254.5289815	-0.389730107	0.133145961	-2.927089208	0.003421507	0.018339514	Zbtb24
ENSMUSG000000059555	676.8862223	-0.296368347	0.101323497	-2.924971562	0.003444877	0.018439388	Tor4a
ENSMUSG000000074238	2024.169428	-0.25564429	0.087428217	-2.924047844	0.003455116	0.018487841	Atf1ar
ENSMUSG000000039007	412.5067813	-0.408610104	0.139776326	-2.923314098	0.00346327	0.018525102	Cpq
ENSMUSG000000019528	222.5799266	-0.393384365	0.134755119	-2.919253586	0.003508707	0.018735964	Gyg
ENSMUSG000000031634	872.9892973	-0.443417604	0.151950337	-2.918174543	0.003520872	0.018781927	Ufsp2
ENSMUSG000000036087	1074.858163	-0.272222747	0.093285458	-2.918169157	0.003520933	0.018781927	Slain2
ENSMUSG000000025968	3013.81543	-0.28453486	0.097557814	-2.916576838	0.003538955	0.018846562	Undf1
ENSMUSG000000024146	538.3612199	-0.387735357	0.133017523	-2.914919398	0.003557804	0.018933209	Cript
ENSMUSG000000038949	312.9423557	-0.351336175	0.120613968	-2.91289791	0.003580917	0.019036685	Cnst
ENSMUSG000000039105	540.0521072	-0.292245249	0.100475039	-2.908635342	0.0036301	0.019258701	Atp6v1g1
ENSMUSG000000026525	105.9963228	-0.577894739	0.198725707	-2.908001929	0.003637461	0.01929118	Optn3
ENSMUSG000000095115	116.5372175	-0.515779066	0.177436765	-2.906833124	0.003651079	0.019350222	Itpril2
ENSMUSG000000026203	390.109048	-0.366427375	0.126110336	-2.905609377	0.003665387	0.019406237	Dnajb2
ENSMUSG000000001687	1485.573038	-0.235899627	0.081195995	-2.905311108	0.003668882	0.019411541	Ubl3
ENSMUSG000000042364	795.7821603	-0.263407595	0.090681128	-2.90476752	0.00367526	0.019438678	Snx18
ENSMUSG000000041341	890.4046791	-0.288356413	0.099274954	-2.904623979	0.003676945	0.019440991	Atg2b
ENSMUSG000000014932	1524.127158	-0.457788746	0.157684824	-2.903188362	0.003693844	0.019517083	Yes1
ENSMUSG000000019794	553.2589554	-0.295262312	0.101869089	-2.898448545	0.003750138	0.019794374	Katna1
ENSMUSG000000025903	2198.755692	-0.473927818	0.163570508	-2.897391618	0.003762797	0.019854462	Lypla1
ENSMUSG000000020149	5950.778482	-0.250229778	0.086383695	-2.896724646	0.003770806	0.019889978	Rab1a
ENSMUSG000000040455	451.8298785	-0.556161885	0.192061895	-2.895742982	0.003782621	0.01993879	Usp45
ENSMUSG000000033061	17.96984633	-1.353615114	0.467817705	-2.893467047	0.003810143	0.020077067	Resp18
ENSMUSG000000024614	624.9817239	-0.45438317	0.157051796	-2.893205813	0.003813313	0.020086976	Tmx3
ENSMUSG000000058240	552.5402224	-0.284833874	0.098453221	-2.893088416	0.003814739	0.02008769	Cryz11
ENSMUSG000000003053	3231.09255	-0.404859927	0.139979881	-2.892272273	0.003824663	0.020126338	Cyp2c29
ENSMUSG000000038768	12.78336406	-1.527421195	0.528209549	-2.891695537	0.003831691	0.020149698	9130409123Rik
ENSMUSG000000093677	32.01333361	-0.945388308	0.32692019	-2.891801538	0.003830398	0.020149698	Gm20712
ENSMUSG000000028042	2096.739601	-0.410404997	0.141981422	-2.890554212	0.003845632	0.020202542	Pzb7b
ENSMUSG000000058318	355.1445842	-0.364464728	0.126111728	-2.889877045	0.003853925	0.020232458	Hnf1a
ENSMUSG000000027882	573.217646	-0.328844952	0.113883598	-2.887553235	0.003882509	0.020368783	Stxbp3
ENSMUSG000000090659	106.0156816	-0.585492628	0.202856668	-2.886238021	0.003898772	0.020447213	Zfp493
ENSMUSG000000013539	356.3813679	-0.354647234	0.122917327	-2.88525013	0.003911028	0.020483893	Tango2
ENSMUSG000000036580	545.7425533	-0.310898269	0.107760421	-2.885087744	0.003913046	0.020487571	Spg20
ENSMUSG000000055917	619.098126	-0.359177035	0.124581356	-2.883072123	0.003938173	0.020598349	Zfp277
ENSMUSG000000002949	1519.056088	-0.220733402	0.076615868	-2.881040287	0.00396365	0.020724644	Timm44
ENSMUSG000000074218	94.36807075	-0.655963935	0.227718738	-2.880588315	0.003969337	0.020746155	Cox7a1
ENSMUSG000000028236	21.26976439	-1.141717125	0.396565401	-2.879013457	0.003989213	0.020830328	Rnf16c5
ENSMUSG000000097893	19.85009035	-1.386947216	0.481977791	-2.877616438	0.00400692	0.020908764	1700034P13Rik
ENSMUSG000000050550	473.6977482	-0.482886758	0.167855308	-2.876803623	0.004017255	0.020955672	Gm11868
ENSMUSG000000020142	1834.03606	-0.256925475	0.08935582	-2.875307684	0.00403634	0.021027047	Slc1a4
ENSMUSG000000017144	405.4358251	-0.420694106	0.146368145	-2.874219027	0.00405028	0.021092611	Rnd3
ENSMUSG000000039983	256.2181777	-0.413061109	0.143743215	-2.873604217	0.004058172	0.021126643	Ccdc32
ENSMUSG000000073563	1045.189506	-0.244206374	0.085024761	-2.872179484	0.004076514	0.021211875	Csnk1g3
ENSMUSG000000049878	1217.343245	-0.376366485	0.131052272	-2.871880654	0.00408037	0.021220924	Rlf
ENSMUSG000000032590	963.7476912	-0.296445514	0.103236217	-2.871526306	0.004084948	0.021237637	Apeh
ENSMUSG000000083007	14.71160864	-1.575841071	0.548960648	-2.870590227	0.004097063	0.021293512	Gm13623
ENSMUSG000000050103	340.1788481	-0.45867015	0.159832817	-2.86968696	0.004108783	0.021347303	Agmo
ENSMUSG000000024580	1121.384695	-0.274063963	0.095513312	-2.869379754	0.004112777	0.021360923	Gpr12
ENSMUSG000000026409	276.7194999	-0.443584547	0.154636482	-2.868563366	0.004123406	0.021401851	Pfkfb2
ENSMUSG000000042744	840.2662728	-0.291528136	0.101648916	-2.86799061	0.004130878	0.021418931	Hectd4
ENSMUSG000000046598	3188.515936	-0.210664885	0.07345895	-2.867790582	0.00413349	0.021418931	Bdh1
ENSMUSG000000034377	623.6483641	-0.299593196	0.104478793	-2.867790582	0.004137256	0.021430876	Tulp4

ENSMUSG00000062797	326.9570197	-0.369850798	0.129009913	-2.866840143	0.004145924	0.021468633	Hikeshi
ENSMUSG00000047040	1886.344181	-0.214895349	0.07505533	-2.863196934	0.004194399	0.021698003	Prr15l
ENSMUSG00000050957	142.8505782	-0.539021425	0.188258592	-2.862034882	0.004193898	0.021698003	Ins16
ENSMUSG00000027944	122.9145236	-0.563757222	0.196977761	-2.862034882	0.004209306	0.021746218	Hax1
ENSMUSG00000034799	43.98769748	-0.847147152	0.295985745	-2.862121457	0.004208156	0.021746218	Unc13a
ENSMUSG00000107487	30.84876232	-1.040467571	0.363713314	-2.86068046	0.004227329	0.021817613	Gm44156
ENSMUSG00000024008	9.106434922	-1.844703539	0.644989704	-2.86005114	0.004235727	0.021853713	Cpn5
ENSMUSG00000020664	3181.526605	-0.307897639	0.107693435	-2.859019583	0.004249525	0.021917642	Dld
ENSMUSG00000084158	55.9346304	-0.859627884	0.300717505	-2.85858944	0.004255291	0.021940113	Gm14652
ENSMUSG00000051285	542.150255	-0.543571578	0.190202427	-2.857858268	0.004265109	0.021980238	Pcmt1d
ENSMUSG00000110557	68.9102301	-0.733536135	0.256678645	-2.85779962	0.004265897	0.021980238	Gm5159
ENSMUSG00000030309	150.8564059	-0.546350896	0.191239587	-2.856892258	0.00427811	0.022027863	Caprin2
ENSMUSG00000003134	241.2055521	-0.407170824	0.142533741	-2.856662716	0.004281205	0.022029955	Tbc1d8
ENSMUSG00000039810	305.5170552	-0.359946763	0.126098539	-2.854487981	0.004310626	0.022144758	Zc3h10
ENSMUSG00000048100	252.5034141	-0.429750111	0.150594754	-2.853685794	0.004321525	0.022178795	Taf13
ENSMUSG00000036151	751.3159485	-0.303375884	0.106315112	-2.853553731	0.004323322	0.022180705	Tm6sf2
ENSMUSG00000079184	367.7520757	-0.432118079	0.151458423	-2.85304752	0.004330215	0.022208752	Mphosph8
ENSMUSG00000010721	440.0762319	-0.360692915	0.126460225	-2.852224202	0.004341447	0.022259028	Lmbr1
ENSMUSG00000006740	4116.723762	-0.343456267	0.120457476	-2.851265673	0.004354557	0.022318896	Kif5b
ENSMUSG00000042487	476.8999324	-0.308648816	0.108273668	-2.850636007	0.004363189	0.022348424	Leo1
ENSMUSG00000026305	993.0026019	-0.315264691	0.110618976	-2.850005497	0.004371847	0.022385411	Lrrfp1
ENSMUSG000000109706	453.2596336	-0.460169769	0.161494192	-2.849450884	0.004379477	0.022417104	Fth-ps3
ENSMUSG00000037438	493.2294526	-0.52871633	0.18563068	-2.848216303	0.004396503	0.022482086	Uqcrh-ps1
ENSMUSG00000040040	149.6979678	-0.503240946	0.17680504	-2.846304299	0.004422991	0.022587861	Ift88
ENSMUSG00000027082	126.618565	-0.554406048	0.194862521	-2.845113805	0.004439556	0.022657595	Tipi
ENSMUSG00000083655	19.5393994	-1.319599424	0.463958784	-2.844216921	0.004452073	0.022706591	Gm12099
ENSMUSG00000038205	185.4216443	-0.557776664	0.196133703	-2.843859339	0.004457072	0.022721935	Prkab2
ENSMUSG00000066880	238.6348862	-0.517014771	0.181804641	-2.843793034	0.004458	0.022721935	Zfp617
ENSMUSG00000020226	22.81852734	-1.156927001	0.406900563	-2.843267141	0.004465363	0.022752016	Slc5a4b
ENSMUSG00000021908	590.0189361	-0.373677609	0.131463729	-2.842438883	0.004476982	0.022803758	Gm6768
ENSMUSG00000007872	42.77882877	-0.804588049	0.283121446	-2.841847771	0.00448529	0.022838605	Id3
ENSMUSG000000071711	890.0304437	-0.341465598	0.120216533	-2.84042129	0.004505399	0.022923569	Mpst
ENSMUSG00000003623	1416.660388	-0.467750208	0.16427955	-2.839503956	0.004518373	0.022966496	Crot
ENSMUSG00000030747	1082.01655	-0.248574002	0.08754327	-2.839441614	0.004519256	0.022966496	Dgat2
ENSMUSG00000030876	1946.574666	-0.244166927	0.085997887	-2.839220077	0.004522395	0.022967456	Mettl9
ENSMUSG000000110770	342.0308121	-0.390979187	0.137715223	-2.839041164	0.004524932	0.022972845	Tpi-r5
ENSMUSG00000037134	279.7868966	-0.417581718	0.147097812	-2.838803054	0.00452831	0.0229825	Prrnt9
ENSMUSG00000013083	89.6717405	-0.59884706	0.211029599	-2.837739643	0.004543423	0.023051299	2200002J24Rik
ENSMUSG00000078664	8.821087211	-1.895143856	0.668359251	-2.835516758	0.004575161	0.023167616	Spr2a1
ENSMUSG00000032531	106.0647779	-0.51560688	0.181902921	-2.834516765	0.004589505	0.023232504	Amotl2
ENSMUSG00000020330	1157.606124	-0.376882391	0.133000098	-2.833700101	0.004601249	0.023276484	Hmmr
ENSMUSG00000039062	9531.91793	-0.397446075	0.14026114	-2.833600892	0.004602678	0.023276484	Anpep
ENSMUSG00000048379	1382.662067	-0.469360785	0.165862722	-2.829814802	0.004657496	0.023523147	Socs4
ENSMUSG00000022656	3568.342565	-0.316831207	0.112125093	-2.825694035	0.00471783	0.023797	Nectin3
ENSMUSG000000062157	212.1993573	-0.460410646	0.162996335	-2.824668692	0.004732953	0.023856474	Ifnlr1
ENSMUSG00000028158	9716.997833	-0.447144943	0.158323935	-2.82424097	0.004739274	0.023874226	Mtp
ENSMUSG00000030084	1034.199257	-0.340800802	0.120694407	-2.823666892	0.00474777	0.023901561	P1xna1
ENSMUSG00000026839	15.42650679	-1.449408064	0.513689918	-2.821562214	0.004779037	0.024035652	Upp2
ENSMUSG00000074715	1611.672812	-0.413409943	0.146540962	-2.821122082	0.004785599	0.024060884	Ccl28
ENSMUSG00000067231	4924.07158	-0.4505324	0.159723378	-2.820704191	0.004791837	0.02408447	Cyp2c65
ENSMUSG00000032175	596.2515913	-0.281178233	0.099745904	-2.818945153	0.004818175	0.024201227	Tyk2
ENSMUSG00000080866	108.2551429	-0.54222103	0.192693817	-2.813899465	0.004894453	0.024544777	Gm5687
ENSMUSG00000026031	531.1777599	-0.385304227	0.136943518	-2.813599606	0.004899021	0.024548488	Cflar
ENSMUSG00000046922	9.242536769	-1.918626246	0.682036124	-2.813085962	0.004906853	0.024567399	Gpr6
ENSMUSG00000027281	227.1406443	-0.457942541	0.162805512	-2.812819637	0.004910919	0.024579851	Slx4ip
ENSMUSG00000045435	250.3034447	-0.361634967	0.128616865	-2.811722759	0.004927696	0.024624245	Tmem60
ENSMUSG00000040147	896.7238796	-0.548427837	0.1951651	-2.810071252	0.004953053	0.024727154	Maob
ENSMUSG00000024835	2428.316723	-0.293595317	0.10448518	-2.809923057	0.004955335	0.024730613	Coro1b
ENSMUSG00000025027	1879.662738	-0.223192066	0.079434557	-2.809760329	0.00495784	0.024735192	Xpnpep1
ENSMUSG00000039747	356.500279	-0.338598712	0.120539261	-2.809032596	0.004969062	0.024783234	Orai2
ENSMUSG00000040701	1085.83567	-0.296172842	0.105450815	-2.808634936	0.004975203	0.024805918	Ap1g2
ENSMUSG00000019256	348.1424754	-0.404720414	0.144112757	-2.808359384	0.004979462	0.024819209	Ahr
ENSMUSG00000051721	90.03003566	-0.603479174	0.214901347	-2.808168408	0.004982416	0.024825986	Wdcp
ENSMUSG00000024480	224.2417885	-0.473343683	0.168642601	-2.806785944	0.005003848	0.024924798	Ap3s1
ENSMUSG000000060743	209.3089053	-0.458040702	0.163330293	-2.804383036	0.005041298	0.025095282	H3f3a
ENSMUSG00000030720	620.4965146	-0.377581875	0.134672675	-2.803700721	0.005051978	0.02514041	Cln3
ENSMUSG00000014226	1296.620699	-0.31354439	0.111900994	-2.801980394	0.005078996	0.025258718	Cacybp
ENSMUSG00000015970	2901.516773	-0.192035402	0.06855943	-2.801006405	0.005094351	0.025305735	Chdh
ENSMUSG00000020246	200.6141583	-0.395171313	0.1411134827	-2.799956052	0.005110956	0.025377137	Hcfc2
ENSMUSG00000084386	17.49075131	-1.313096465	0.469060218	-2.79941981	0.005119453	0.025411222	Gm13852
ENSMUSG00000011081	25.16275714	-1.361444958	0.487049169	-2.795292641	0.005185275	0.025713351	Ac156164.1
ENSMUSG00000027634	903.8499881	-0.327394855	0.117172901	-2.794117517	0.005204156	0.025797421	Ndrp3
ENSMUSG00000020544	204.3527318	-0.400767697	0.143460134	-2.79358234	0.005212776	0.025819011	Cox11
ENSMUSG00000001542	509.6217652	-0.342039181	0.122450946	-2.793275121	0.005217729	0.025833152	Eil2
ENSMUSG00000053113	181.9695057	-0.46501441	0.166499506	-2.792887633	0.005223984	0.025855896	Socs3
ENSMUSG00000021646	526.6098993	-0.289331585	0.103661111	-2.791129493	0.005252445	0.025972	Mccc2
ENSMUSG00000021733	2562.768609	-0.458739583	0.164379249	-2.790739011	0.005258786	0.025995096	Slc4a7
ENSMUSG00000027858	11.87216697	-1.541568981	0.552690806	-2.789206851	0.005283731	0.026085279	Tspan2
ENSMUSG00000037999	818.5737024	-0.463137939	0.166125028	-2.787887807	0.005305291	0.026166833	Arap2
ENSMUSG00000050243	135.8180877	-0.4751221	0.170462294	-2.787256282	0.005315642	0.026209583	Gm5446
ENSMUSG00000052146	348.8863563	-0.375139145	0.134602024	-2.78702455	0.005319445	0.02622003	Rps10
ENSMUSG00000091408	193.0938569	-0.396585936	0.142314673	-2.786683398	0.005325048	0.026235852	Gm6728
ENSMUSG00000035873	674.5855327	-0.285624165	0.102571024	-2.784647688	0.005358591	0.026354587	Pawr
ENSMUSG00000021974	48.11835756	-0.774985131	0.278465781	-2.783053374	0.005384995	0.026451026	Fgf9
ENSMUSG00000021716	716.0412055	-0.333343581	0.119837487	-2.781630269	0.005408662	0.026550528	Srek1ip1
ENSMUSG00000005699	77.96666332	-0.591362841	0.212624077	-2.781259997	0.005414835	0.026572455	Par6a
ENSMUSG00000021930	483.753762	-0.377319042	0.135760269	-2.779303878	0.005447554	0.026699358	Spryd7
ENSMUSG00000028108	33.5960815	-1.048953288	0.377592328	-2.77800477	0.005469382	0.026789475	Ecm1
ENSMUSG000000105654	94.67155289	-0.582917984	0.20982899	-2.778062191	0.005468415	0.026789475	Cm29704
ENSMUSG00000005103	3509.804383	-0.194255818	0.069934717	-2.777673591	0.005474959	0.026799931	Wdr1
ENSMUSG00000013160	674.7811718	-0.297386743	0.107062437	-2.777694494	0.005474606	0.026799931	Atp6v0d1
ENSMUSG00000020592	4686.527081	-0.249382922	0.089792146	-2.777694494	0.005480656	0.026813628	Sdc1

ENSMUSG00000025340	343.6235451	-0.337226264	0.121466513	-2.776289995	0.005498314	0.026865747	Rabgef1
ENSMUSG00000065999	11.1274956	-1.722907256	0.620607637	-2.77520569	0.005500482	0.026865747	Zfp985
ENSMUSG00000028156	1050.764908	-0.34944011	0.125915031	-2.774128731	0.005516681	0.026927972	Eif4e
ENSMUSG00000010290	466.3594946	-0.366626448	0.132159133	-2.773407043	0.005534977	0.027000354	Al597479
ENSMUSG00000008384	269.156248	-0.498852129	0.179869785	-2.772155168	0.005547269	0.027043369	Sertad1
ENSMUSG00000019818	6926.430241	-0.307990506	0.111101467	-2.77219029	0.005568648	0.027103834	Cd164
ENSMUSG00000021456	2425.51072	-0.2094354	0.07554871	-2.771543225	0.005568048	0.027103834	Fbp2
ENSMUSG00000022724	480.9183749	-0.319806174	0.115389207	-2.770912787	0.005579126	0.027130724	Riox2
ENSMUSG00000046934	1044.308111	-0.259185896	0.093538092	-2.770136088	0.00558994	0.027166339	Csl
ENSMUSG00000025417	1048.352663	-0.260553023	0.094057842	-2.769610903	0.005603288	0.027222712	Pip4k2c
ENSMUSG00000025733	471.9359343	-0.327915026	0.118397507	-2.769380083	0.005612329	0.027232652	Rhot2
ENSMUSG00000033174	63.9964892	-0.789192857	0.284970944	-2.76885734	0.005616307	0.027243254	Mgll
ENSMUSG00000021282	6972.827097	-0.195117695	0.070467948	-2.767984255	0.005624836	0.027266885	Eif5
ENSMUSG00000021096	1931.761928	-0.249148658	0.090010865	-2.767626808	0.005640418	0.027317869	Ppm1a
ENSMUSG00000058022	345.87275	-0.321713772	0.116241746	-2.766084638	0.005646607	0.027339342	Adtrp
ENSMUSG000000075271	83.51090503	-0.555863745	0.200956882	-2.764721702	0.005673381	0.027451899	Tct30a1
ENSMUSG00000042073	693.23385	-0.323294824	0.116929602	-2.762656429	0.005694597	0.027537444	Abhd14b
ENSMUSG00000026021	383.2517717	-0.395941589	0.143212096	-2.762427207	0.005697138	0.027541178	Sumo1
ENSMUSG00000083055	35.8129503	-1.047450641	0.379146183	-2.761174934	0.005733308	0.027690242	Gm14140
ENSMUSG00000039285	1254.731263	-0.300695002	0.108851738	-2.759604784	0.005737335	0.0277011	Azi2
ENSMUSG00000038618	714.7429238	-0.355577236	0.128777511	-2.758329635	0.005759382	0.027790311	Rassf7
ENSMUSG00000092240	248.2122986	-0.388608779	0.140768231	-2.757827841	0.005769027	0.027828229	Gm4246
ENSMUSG00000084022	126.5110697	-0.592367582	0.214611574	-2.757808726	0.005776869	0.027850957	Pm16459
ENSMUSG00000103472	26.62777511	-0.992578997	0.359681576	-2.75737141	0.005787132	0.027889644	Pcdhga7
ENSMUSG00000022312	3657.857669	-0.235278257	0.085297368	-2.754111556	0.005809758	0.027990019	Eif3h
ENSMUSG00000020321	5918.734504	-0.22290777	0.080827297	-2.753996863	0.005818683	0.028017321	Mdh1
ENSMUSG00000034382	1138.995829	-0.282604796	0.102474401	-2.753730934	0.005819024	0.028017321	Al661453
ENSMUSG00000001891	2566.540107	-0.42549377	0.154302099	-2.751425625	0.00582386	0.028023275	Ugp2
ENSMUSG00000054091	488.4388278	-0.317697676	0.115241376	-2.751175476	0.005836965	0.02807766	B1003717Rik
ENSMUSG00000033488	64.26598849	-0.669030259	0.242920537	-2.750980396	0.00588517	0.028274603	BC026585
ENSMUSG00000045314	764.5517822	-0.269901494	0.098003559	-2.750980396	0.005887233	0.028275789	Sowahb
ENSMUSG00000027353	264.7621372	-0.354372576	0.128688163	-2.750980396	0.005892019	0.028290047	Mcm8
ENSMUSG00000029338	434.3865976	-0.34898873	0.126839238	-2.750980396	0.005933649	0.028463602	Antxr2
ENSMUSG00000022024	894.9527421	-0.332304497	0.120786369	-2.750980396	0.005938182	0.028472505	Sugt1
ENSMUSG00000024486	127.8433928	-0.463597874	0.168612182	-2.749492167	0.005968769	0.028588035	Vbgef
ENSMUSG00000015747	207.8375202	-0.440584998	0.160288562	-2.749098096	0.005983232	0.028647383	Hsp45
ENSMUSG00000038122	288.7402923	-0.508686409	0.185158769	-2.747979707	0.006008842	0.028735773	Tbc1d32
ENSMUSG00000022110	1834.618301	-0.340895886	0.124209336	-2.747979707	0.006059815	0.028899659	Sucla2
ENSMUSG00000024197	2260.542283	-0.224117335	0.081693681	-2.747979707	0.006080908	0.028991372	Plin3
ENSMUSG00000045319	298.9529274	-0.375569034	0.136979151	-2.747979707	0.006110408	0.02909638	Proser2
ENSMUSG00000019814	989.5353215	-0.247031634	0.090127568	-2.740980396	0.006126912	0.029148227	Ltv1
ENSMUSG00000026360	46.05896853	-0.74836514	0.273027623	-2.740980396	0.006125495	0.029148227	Rgs2
ENSMUSG00000074513	263.2912595	-0.396394208	0.144617673	-2.739963886	0.006125616	0.029148227	Arfp1
ENSMUSG00000028150	1644.909152	-0.221747475	0.080930802	-2.739963886	0.006144594	0.029205576	Rorc
ENSMUSG00000024854	222.8153738	-0.392912093	0.143414352	-2.739698567	0.006149556	0.029220241	Pold4
ENSMUSG00000026610	585.0738439	-0.287464885	0.104992076	-2.739698567	0.00618202	0.029347631	Esrrg
ENSMUSG00000069125	419.939604	-0.386274394	0.141224355	-2.735182571	0.006234569	0.029552702	Rps24-ps2
ENSMUSG00000028082	2703.113083	-0.24150282	0.088337093	-2.733877838	0.006259326	0.029624307	Sh3d19
ENSMUSG00000042306	276.4263326	-0.360995403	0.132042755	-2.733941206	0.00625837	0.029624307	S100a14
ENSMUSG00000067928	183.4407664	-0.491978154	0.179951987	-2.73213546	0.006258122	0.029624307	Zfp760
ENSMUSG00000028136	1311.675267	-0.270915546	0.0991589	-2.727528829	0.006292526	0.029757864	Snx27
ENSMUSG00000022951	306.8064304	-0.337793907	0.123658776	-2.727528829	0.006301587	0.029788101	Rcan1
ENSMUSG00000028676	1074.498715	-0.316429609	0.115861585	-2.727467721	0.006312326	0.029829811	Srsf10
ENSMUSG00000021911	991.7890512	-0.303972995	0.114477782	-2.727467721	0.00638177	0.030121413	Parg
ENSMUSG00000052520	10.77464494	-1.537671024	0.56375977	-2.727467721	0.006381068	0.030121413	Cyp2j5
ENSMUSG000000081594	15.65056915	-1.312557271	0.481729455	-2.726477218	0.006436438	0.03034265	Gm15467
ENSMUSG00000034918	3864.349148	-0.246780525	0.090615984	-2.723366376	0.006462035	0.030454101	Cdh12
ENSMUSG00000038831	280.1620942	-0.393187097	0.144452075	-2.721920719	0.006490371	0.030541788	Ralgps1
ENSMUSG00000040560	344.6857188	-0.399067326	0.146612611	-2.721916768	0.006490449	0.030541788	Wdr1
ENSMUSG00000031378	222.5103325	-0.397800644	0.146186025	-2.721194758	0.006504643	0.030599333	Abcd1
ENSMUSG00000035790	283.4130591	-0.354014584	0.130123622	-2.720601984	0.006516317	0.030635739	Cep19
ENSMUSG00000026179	373.8538414	-0.308936219	0.113581392	-2.719954513	0.00652909	0.030668011	Pnk4
ENSMUSG00000021482	398.0888235	-0.333729602	0.122716315	-2.719521058	0.006537653	0.030698974	Aaed1
ENSMUSG00000081731	782.3230648	-0.410586779	0.150983476	-2.719415328	0.006539744	0.030699532	Calr-ps
ENSMUSG00000006850	131.2286676	-0.513032373	0.188859366	-2.716478323	0.006598052	0.030954583	Tmcof6
ENSMUSG000000029161	1262.847019	-0.334164262	0.123060866	-2.715438906	0.006618799	0.031037897	Cgref1
ENSMUSG00000037905	2769.736217	-0.220135361	0.081069549	-2.71538898	0.006619797	0.031037897	Bri3bp
ENSMUSG00000025544	4923.273287	-0.228826723	0.084316339	-2.713907231	0.006649478	0.03114227	Tmr5f2
ENSMUSG00000034867	746.5939925	-0.252471245	0.093029683	-2.71387838	0.006650058	0.03114227	Ankrd27
ENSMUSG00000083212	191.0543806	-0.479824511	0.177006096	-2.710779578	0.006712523	0.031389232	Gm12274
ENSMUSG00000063663	811.1768662	-0.510743855	0.188434504	-2.710458243	0.006719031	0.031408595	Brd3
ENSMUSG00000028347	141.1521303	-0.542292113	0.20009399	-2.71018692	0.00672453	0.031424867	Tmeff1
ENSMUSG00000032422	592.8057102	-0.285644989	0.105414993	-2.709718812	0.006734027	0.031459807	Snx14
ENSMUSG00000043484	588.682896	-0.262965008	0.09711711	-2.707710399	0.006774911	0.031584474	Gm5867
ENSMUSG00000028890	414.8097142	-0.348778413	0.128875515	-2.706320221	0.006803341	0.031698031	Mtf1
ENSMUSG00000002635	232.6731689	-0.381113204	0.141169158	-2.69969169	0.006940376	0.032278553	Pdcd2l
ENSMUSG00000035441	6322.316476	-0.203828122	0.075636431	-2.694840562	0.007042232	0.032722946	Myo1d
ENSMUSG00000066232	6481.950467	-0.342648709	0.127313949	-2.691368161	0.007115962	0.033006447	Ipo7
ENSMUSG00000021650	681.3795303	-0.274724215	0.102162429	-2.689091787	0.007164672	0.033202709	Pctd1
ENSMUSG00000031592	1681.109725	-0.466468732	0.173539735	-2.687964987	0.007188893	0.03329514	Pcm1
ENSMUSG00000102644	299.2919877	-0.397791571	0.148114879	-2.685696229	0.007237886	0.033476598	Thap6
ENSMUSG00000022789	2168.392339	-0.36444112	0.135795327	-2.683753027	0.007280086	0.033623548	Dnm1l
ENSMUSG00000063787	802.0668841	-0.256321412	0.095510708	-2.683692924	0.007281395	0.033623548	Chchd1
ENSMUSG00000027961	93.48422751	-0.551263791	0.205627025	-2.680891726	0.007342627	0.033874726	Lrrc39
ENSMUSG000000073910	835.2367323	-0.276539632	0.103187171	-2.679980757	0.007362639	0.033948373	Mob3b
ENSMUSG000000019791	177.7314526	-0.392800771	0.146611276	-2.679198912	0.007379854	0.034003146	Hint3
ENSMUSG00000020948	198.4241613	-0.452606038	0.168941349	-2.679072006	0.007382652	0.034003146	Khlh28
ENSMUSG00000106827	58.06234786	-0.69433742	0.259173509	-2.679044715	0.007383253	0.034003146	Gm7556
ENSMUSG00000046095	73.61891549	-0.680738875	0.254231629	-2.677632506	0.007414452	0.034099456	Krt32
ENSMUSG00000028251	130.1510413	-0.662431396	0.247628372	-2.675102977	0.00747063	0.034334468	Tstd3
ENSMUSG00000045594	2307.78482	-0.214935139	0.080351605	-2.674932742	0.007474424	0.034341771	Glb1
ENSMUSG00000028563	112.7739606	-0.516990746	0.193486663	-2.674932742	0.007540717	0.034631989	Tm2d1



ENSMUSG00000109768	15.69604923	-1.239195315	0.464505812	-2.667771391	0.007635619	0.035023757	Gm45446
ENSMUSG00000022114	270.319111	-0.368874613	0.138284942	-2.667771391	0.007641866	0.035038721	Spry2
ENSMUSG00000114622	87.64199115	-0.536472698	0.201147764	-2.667057725	0.007651853	0.035063861	CT025642.2
ENSMUSG00000058835	1824.670025	-0.280348797	0.10513516	-2.666556056	0.007663283	0.03509558	Abi1
ENSMUSG00000083899	643.5390555	-0.528821242	0.198363176	-2.665924457	0.007677694	0.035130584	Gm12346
ENSMUSG00000030691	845.6191459	-0.310103482	0.116327402	-2.665781897	0.007680951	0.035135159	Fchs2
ENSMUSG00000028224	430.3623095	-0.350085391	0.131382134	-2.664634681	0.0077072	0.03523453	Nbn
ENSMUSG00000036136	178.1301243	-0.463306881	0.173904567	-2.664144414	0.007718442	0.035252009	Fam110c
ENSMUSG00000038784	400.9830853	-0.338439045	0.127063675	-2.66353893	0.007732346	0.035287329	Cnot4
ENSMUSG00000028382	5898.652714	-0.423793592	0.1591175	-2.663400264	0.007735534	0.035288561	Ptbp3
ENSMUSG00000031833	664.5555333	-0.297532618	0.111714513	-2.663330024	0.007737149	0.035288561	Mast3
ENSMUSG00000040078	765.3123103	-0.277238465	0.104136305	-2.662265236	0.007761669	0.035379669	Ptges3-ps
ENSMUSG00000054381	191.16791	-0.440080682	0.165310426	-2.662147162	0.007764392	0.035381725	Zfp747
ENSMUSG00000047281	508.325451	-0.305019611	0.114708153	-2.659092689	0.00783514	0.035620722	Sfn
ENSMUSG00000051373	9.397374324	-1.622214881	0.610331417	-2.65792459	0.007862348	0.035733983	Plpp7
ENSMUSG00000029992	5200.409891	-0.338678157	0.127445229	-2.657440847	0.007873641	0.035764428	Glpt1
ENSMUSG00000033623	1491.999221	-0.275898754	0.103958668	-2.653927356	0.007956095	0.036044329	Pcgl3
ENSMUSG00000111151	277.8282514	-0.361020958	0.136115124	-2.652320681	0.007994058	0.036174215	Gm5120
ENSMUSG000000113198	61.0727448	-0.745859394	0.281278843	-2.651672573	0.008009417	0.036222664	Gm988
ENSMUSG00000027007	1576.163266	-0.275546246	0.10398667	-2.649822764	0.008053401	0.036389873	Ssfa2
ENSMUSG00000003762	217.7221283	-0.380645554	0.143679797	-2.649262881	0.008066756	0.036422571	Coq8b
ENSMUSG00000050029	1143.971791	-0.43580512	0.164526099	-2.648850983	0.008076594	0.036452359	Rap2c
ENSMUSG00000005312	2974.83052	-0.190164878	0.071825326	-2.647602004	0.00810649	0.036576689	Ubp1n1
ENSMUSG00000039197	1299.248909	-0.226182588	0.085453229	-2.6468583	0.008124339	0.036646605	Adk
ENSMUSG00000097867	109.7852669	-0.528219362	0.199719833	-2.644801739	0.008173879	0.036848719	Lppos
ENSMUSG00000107832	17.86726809	-1.187722332	0.449136193	-2.644459185	0.008182157	0.036875361	Gm18688
ENSMUSG00000025348	79.50496796	-0.604230438	0.228546869	-2.643792232	0.008198296	0.03692672	Itga7
ENSMUSG00000031242	666.3517667	-0.355794378	0.134667787	-2.642015486	0.008241429	0.037067385	2610002M06Rik
ENSMUSG00000026437	746.8072567	-0.286329794	0.108380812	-2.64188641	0.00824457	0.037070806	Cdk18
ENSMUSG00000058624	438.7161183	-1.231207958	0.466287722	-2.640446874	0.008279677	0.037207173	Gda
ENSMUSG00000026820	739.7518878	-0.284600372	0.10779091	-2.640300304	0.008283259	0.03721253	Ptges2
ENSMUSG00000020669	333.8954165	-0.347980531	0.131818309	-2.639849763	0.008294279	0.037251287	Sh3yl1
ENSMUSG00000075486	653.5583682	-0.258070413	0.097778918	-2.639325731	0.008307112	0.037276669	Comm6d
ENSMUSG00000021509	34.84216674	-0.850437757	0.322350489	-2.63823939	0.008333773	0.037365378	Slc25a48
ENSMUSG00000026578	163.3021433	-0.488988188	0.185412826	-2.637294291	0.00835703	0.037425167	Ccdc181
ENSMUSG00000031954	1549.480021	-0.263236047	0.099812747	-2.637298883	0.008356916	0.037425167	Cfdp1
ENSMUSG00000048578	17171.88656	-0.198300567	0.075213513	-2.636501847	0.008376574	0.037501909	Mlec
ENSMUSG00000100347	280.1968271	-0.444166591	0.1685753	-2.634826052	0.008418041	0.037665896	Gm7895
ENSMUSG00000046567	118.3645825	-0.475711241	0.180557638	-2.634678028	0.008421713	0.037671499	4930430F08Rik
ENSMUSG00000052738	2946.716274	-0.203895166	0.077407403	-2.634052528	0.008437243	0.037719299	Suclg1
ENSMUSG00000020814	352.3082911	-0.321762243	0.122186948	-2.633360167	0.008454464	0.037774594	Mxra7
ENSMUSG00000023882	188.6711406	-0.604979894	0.229798424	-2.632654667	0.008472044	0.03783143	Zfp454
ENSMUSG00000030650	299.5364706	-0.437166642	0.166092401	-2.632068903	0.008486665	0.037864143	Tmc5
ENSMUSG00000045095	898.6083943	-0.254453723	0.096685068	-2.631778916	0.008493912	0.037880629	Magi1
ENSMUSG00000025607	1005.740241	-0.243731633	0.092634799	-2.631102301	0.008510841	0.037935547	Copg2
ENSMUSG00000022214	1438.029708	-0.218499223	0.083189431	-2.626526228	0.008626134	0.038387408	Dcaf11
ENSMUSG00000079507	262.5585997	-0.635093531	0.241826303	-2.626238432	0.008633432	0.038408905	H2-Q1
ENSMUSG00000027001	167.0207487	-0.397759933	0.151584185	-2.624020005	0.008689868	0.038615849	Dusp19
ENSMUSG00000026870	201.7931929	-0.432858977	0.165027129	-2.62295648	0.008717041	0.038714501	Cutal
ENSMUSG00000062937	787.5564783	-0.263392744	0.100443567	-2.622295811	0.008733959	0.038767523	Mtap
ENSMUSG00000026112	3485.182718	-0.247425716	0.094366187	-2.621974285	0.008742203	0.038793057	Coa5
ENSMUSG00000053870	463.7215675	-0.42329538	0.161488361	-2.621212935	0.008761752	0.038868728	Fpgt
ENSMUSG00000027598	1336.793104	-0.274215851	0.104659112	-2.620085771	0.008790765	0.038964136	Itch
ENSMUSG00000020256	1045.450325	-0.291945308	0.111456669	-2.619362685	0.008809423	0.039035722	Aldh112
ENSMUSG00000027305	381.3205184	-0.331183869	0.12644783	-2.619134465	0.008815319	0.039050735	Ndufa11
ENSMUSG00000022139	1759.83457	-0.376681444	0.143899026	-2.617678889	0.008853007	0.039206534	Mbnl2
ENSMUSG00000026761	672.555335	-0.403301641	0.154120463	-2.616794897	0.008875966	0.039297032	Crc4
ENSMUSG00000001739	5330.542665	-0.173246627	0.066215868	-2.616391373	0.008886463	0.039318288	Cldn15
ENSMUSG00000040339	326.4899356	-0.532183281	0.203398942	-2.616450583	0.008884922	0.039318288	Fam102b
ENSMUSG00000047221	606.7142427	-0.269181897	0.102901359	-2.615921698	0.008898696	0.039352911	Fam185a
ENSMUSG00000016619	1748.776721	-0.210939434	0.080644969	-2.615655222	0.008905643	0.039372451	Nup50
ENSMUSG000000084215	612.3777338	-0.510112255	0.195102226	-2.614589616	0.008933472	0.039473069	Gm11814
ENSMUSG000000064210	3196.0361	-0.228658747	0.087465165	-2.614283618	0.008941478	0.039497234	Ano6
ENSMUSG00000035133	2937.943085	-0.446852541	0.171064276	-2.612190876	0.008996401	0.039716411	Ahrgap5
ENSMUSG00000038736	774.3852396	-0.414297965	0.158607133	-2.612101721	0.008998747	0.039716411	Nudcd1
ENSMUSG00000036323	2763.680361	-0.237543708	0.090946611	-2.6119028	0.009003985	0.039728266	Sprc72
ENSMUSG00000053436	1097.593867	-0.237944686	0.091104402	-2.611780356	0.00900721	0.039731238	Mapk14
ENSMUSG00000029684	1983.584772	-0.290174612	0.111148323	-2.610697161	0.009035787	0.039834722	Wasl
ENSMUSG00000027784	735.0130535	-0.291051631	0.111503489	-2.61024684	0.009047691	0.03986744	Ppm1l
ENSMUSG00000106246	404.9595602	-0.397167872	0.152187298	-2.609730752	0.009061351	0.039887659	Gm18867
ENSMUSG00000109274	24.47490502	-0.990706033	0.379839031	-2.608225989	0.009101285	0.040021492	Gm45133
ENSMUSG00000061079	331.9261976	-0.356273287	0.136631562	-2.607547494	0.009119342	0.040089574	Zfp143
ENSMUSG00000041426	389.1557445	-0.452899044	0.173711146	-2.607196217	0.009128703	0.040119401	Hibch
ENSMUSG00000030615	473.5194929	-0.26780223	0.102725092	-2.606979707	0.009134477	0.04013345	Tmem126a
ENSMUSG00000049516	681.5617793	-0.36502646	0.140072114	-2.605989515	0.009160927	0.040226957	Spy2d1
ENSMUSG00000022305	159.5950597	-0.477595268	0.183280156	-2.60582093	0.009165436	0.040235414	Lrp12
ENSMUSG00000095440	12.24700078	-1.355034226	0.520177092	-2.604947902	0.009188823	0.04030399	Figl2
ENSMUSG00000000266	316.994026	-0.519096289	0.19930567	-2.604523433	0.009200213	0.040331226	Mid2
ENSMUSG00000003184	679.9771657	-0.318227427	0.122200131	-2.604149648	0.009210253	0.040339207	Irf3
ENSMUSG00000025545	580.4534727	-0.290231543	0.111465425	-2.603780889	0.009220168	0.040339207	Cybl
ENSMUSG00000033653	302.8269194	-0.32147677	0.123459573	-2.60390314	0.00921688	0.040339207	Vps8
ENSMUSG00000005371	1190.700836	-0.310953709	0.119495878	-2.602212845	0.009262435	0.040489997	Fbxo11
ENSMUSG00000041945	389.0215618	-0.354242479	0.136136439	-2.602113603	0.009265116	0.040490349	Mfsd9
ENSMUSG00000020607	824.7386843	-0.244331773	0.093920757	-2.601467254	0.009282593	0.040555345	Fam84a
ENSMUSG000000081390	137.6142813	-0.428118606	0.164590635	-2.601111569	0.009292223	0.04057465	Gm14538
ENSMUSG00000040785	1437.228733	-0.285134142	0.109636003	-2.600734563	0.00930244	0.040607876	Ttc3
ENSMUSG00000047603	94.09363923	-0.512689149	0.197162944	-2.600332189	0.009313356	0.040634994	Zfp235
ENSMUSG00000086229	1052.899391	-0.329641154	0.126769789	-2.600313185	0.009313872	0.040634994	Gm4887
ENSMUSG00000080904	776.8536003	-0.432727836	0.166571652	-2.597848016	0.009381001	0.040842599	Gm11966
ENSMUSG00000021065	2581.83709	-0.216743535	0.083456306	-2.597089987	0.009401729	0.040913927	Fut8
ENSMUSG00000104913	4016.066173	-0.229685858	0.088442625	-2.597004074	0.009404081	0.040913927	Gm6560
ENSMUSG00000057894	242.4332444	-0.452552862	0.174266441	-2.59604158	0.009406877	0.04091466	Zfp329

ENSMUSG00000018750	504.831251	-0.305046719	0.11748262	-2.596526357	0.009417168	0.040947982	Zbtb4
ENSMUSG00000026383	586.5192138	-0.30628939	0.118009818	-2.595098594	0.009446526	0.041064171	Epb41l5
ENSMUSG00000036473	745.3291777	-0.398069858	0.153392961	-2.595098594	0.009456379	0.041072601	Tbcl1d24
ENSMUSG00000015882	1153.931436	-0.44083682	0.16989143	-2.594814939	0.009464186	0.041083592	Lcorl
ENSMUSG00000063296	235.1875265	-0.384492609	0.14824125	-2.593695134	0.009495064	0.041194662	Tmem117
ENSMUSG00000031379	118.024609	-0.579169346	0.223450913	-2.591930991	0.009543891	0.041371919	Pir
ENSMUSG000000098112	35.96011953	-0.812155354	0.313408482	-2.591363664	0.009559641	0.041417132	Bin2
ENSMUSG00000037606	145.6700979	-0.415978868	0.160620574	-2.589823067	0.009602527	0.041556685	Osbpl5
ENSMUSG00000011209	72.62681128	-0.768179709	0.296688016	-2.589183481	0.009620382	0.041582575	Gm7529
ENSMUSG000000017314	101.6343807	-0.538155463	0.208056457	-2.586583807	0.009693259	0.041804297	Mpp2
ENSMUSG00000024583	2108.870859	-0.231918739	0.089657993	-2.58670456	0.009689863	0.041804297	Txn1l
ENSMUSG00000029428	57.36629266	-0.777921397	0.300771503	-2.58641989	0.009697871	0.041804297	Stx2
ENSMUSG00000030265	1814.500705	-0.317157784	0.122619143	-2.586527489	0.009694844	0.041804297	Kras
ENSMUSG00000021037	1471.324693	-0.216521504	0.083764284	-2.584890521	0.009740992	0.041913812	Ahsa1
ENSMUSG000000083460	31.09579622	-0.980706837	0.379492798	-2.584256785	0.009758911	0.041976795	Gm12182
ENSMUSG000000073791	68.00766918	-0.704767236	0.272777713	-2.583674214	0.009775408	0.042017481	Efcab7
ENSMUSG00000045799	276.6705625	-0.366855369	0.142111138	-2.581463698	0.009838234	0.04224797	Gm9800
ENSMUSG00000047045	1547.419568	-0.227110979	0.087976638	-2.581491922	0.009837429	0.04224797	Tmem164
ENSMUSG000000027357	971.9120721	-0.2369275	0.091790079	-2.581188536	0.009846079	0.042270003	Crls1
ENSMUSG00000030304	768.7546545	-0.244394337	0.094713403	-2.580356413	0.009869839	0.042360327	Ergic2
ENSMUSG00000027742	563.987916	-0.285851402	0.110814694	-2.579544215	0.009893079	0.042448371	Cog6
ENSMUSG00000060733	1554.553099	-0.270573661	0.104931953	-2.578563095	0.009921218	0.042545658	Ipml
ENSMUSG00000025912	70.37978117	-0.73366696	0.284705808	-2.57693008	0.009968211	0.042723649	Mybl1
ENSMUSG00000026457	2333.931779	-0.205008722	0.079636699	-2.574299591	0.010044326	0.043014355	Adipor1
ENSMUSG00000040631	546.9761167	-0.265424024	0.103165719	-2.572792844	0.010088157	0.04317831	Dok4
ENSMUSG00000028967	933.4967814	-0.249008906	0.096815458	-2.571995325	0.010111426	0.043230473	Erff1
ENSMUSG000000081483	74.37807312	-0.575378501	0.223723271	-2.571831256	0.010116219	0.04323899	Gm12445
ENSMUSG00000021510	280.1956487	-0.435128478	0.169275847	-2.570529027	0.010154332	0.043378079	Zfp729a
ENSMUSG00000025920	539.9849231	-0.325946836	0.126850711	-2.569531016	0.010183628	0.043491296	Stag2
ENSMUSG00000002265	47.91169988	-0.71166513	0.277017016	-2.569030379	0.010198352	0.043542236	Pes3
ENSMUSG00000019359	59.56152039	-0.691699559	0.269256902	-2.568920437	0.010201588	0.043544112	Gdppd2
ENSMUSG00000031078	2018.212792	-0.19253592	0.07496234	-2.568435301	0.010215878	0.043593159	Cttn
ENSMUSG00000013465	1128.499891	-0.218650931	0.08526575	-2.564346528	0.010337028	0.044061831	Nelfb
ENSMUSG00000026249	12.94535437	-1.4800258	0.577346121	-2.563498301	0.010362321	0.044133396	Serpine2
ENSMUSG00000021770	450.6968913	-0.3036441	0.118509294	-2.562196518	0.010401245	0.044262853	Samd8
ENSMUSG00000022337	502.3812231	-0.33767222	0.131816642	-2.561681255	0.010416687	0.04430262	Emc2
ENSMUSG00000035878	80.88217389	-0.562749885	0.219686872	-2.561599971	0.010419125	0.04430262	Hykk
ENSMUSG00000038781	417.9078947	-0.284157657	0.11099026	-2.56020354	0.010461087	0.044432513	Stap2
ENSMUSG00000022442	117.2451163	-0.495147445	0.193503522	-2.558854945	0.010501755	0.044580924	Tll1
ENSMUSG00000005968	433.3385289	-0.290400457	0.113498017	-2.558639042	0.010508279	0.044584308	Tuft1
ENSMUSG00000034152	792.0525155	-0.257228651	0.100551772	-2.558171247	0.010522426	0.044620561	Exoc3
ENSMUSG000000058997	1286.510413	-0.297541705	0.116310509	-2.558166998	0.010522555	0.044620561	Vwa8
ENSMUSG00000025234	1983.449096	-0.309052954	0.120828304	-2.557786093	0.010534087	0.044645146	Arih1
ENSMUSG00000022747	1156.189702	-0.23863653	0.093316952	-2.557268795	0.010549766	0.044699432	Sl3gal6
ENSMUSG00000021457	32.57241247	-0.839966977	0.328477977	-2.557148528	0.010553415	0.044702725	Syk
ENSMUSG00000025759	98.89955293	-0.531114461	0.207845936	-2.555327625	0.010608789	0.044912848	Mfsd8
ENSMUSG00000029775	1692.869462	-0.261765456	0.102447848	-2.555109362	0.010615444	0.044928806	Klhdc10
ENSMUSG00000032737	1493.900601	-0.229701772	0.089980603	-2.5527921	0.010686326	0.045179686	Inpp1
ENSMUSG00000048000	1695.239443	-0.21638039	0.084772059	-2.552496573	0.010695396	0.045193491	Gigyf2
ENSMUSG00000020386	1728.558437	-0.281505538	0.110383883	-2.5502413	0.010764838	0.045455493	Sar1b
ENSMUSG00000067058	567.2045799	-0.47432165	0.185994009	-2.550198544	0.010766159	0.045455493	Rps15a-ps5
ENSMUSG00000019710	1200.333733	-0.204368887	0.080145568	-2.549971156	0.010773183	0.045472821	Mrlp24
ENSMUSG00000034101	862.6822252	-0.253064996	0.099287608	-2.548807473	0.010809196	0.045600104	Ctnd1
ENSMUSG000000071379	559.5263171	-0.300936946	0.118148618	-2.547105085	0.010862072	0.045772203	Hpcal1
ENSMUSG00000022807	305.8410979	-0.315488312	0.123947811	-2.545331855	0.010917393	0.045969368	Osbpl11
ENSMUSG000000089876	485.310276	-0.320892786	0.126208311	-2.542564627	0.011004225	0.046297429	Tmem102
ENSMUSG000000113389	100.2907082	-0.487255278	0.191761297	-2.540946929	0.011055527	0.046487067	Gm9512
ENSMUSG00000042251	227.3001922	-0.391246102	0.154002444	-2.54051878	0.011068815	0.0465208	Pm20d1
ENSMUSG00000042389	174.643009	-0.369131178	0.145360174	-2.539424443	0.011103503	0.046639503	Tsen2
ENSMUSG000000070709	135.3858447	-0.602019571	0.23710612	-2.539030076	0.011116027	0.046679518	Pip974
ENSMUSG00000004789	3407.232115	-0.24803727	0.097718503	-2.538283571	0.011139768	0.046727854	Dist
ENSMUSG00000022757	2220.250263	-0.196393661	0.077404453	-2.537239811	0.011173039	0.046801248	Tfg
ENSMUSG00000036769	115.082656	-0.654636443	0.258004175	-2.537309492	0.011170815	0.046801248	Wdr44
ENSMUSG00000064373	6178.91514	-0.407059453	0.160484674	-2.536438172	0.011198652	0.046862189	Selenop
ENSMUSG000000004610	357.2619401	-0.352692087	0.139118141	-2.535198393	0.011238366	0.047015743	Etfb
ENSMUSG00000031641	342.3728645	-0.29641497	0.117009496	-2.53325568	0.011300849	0.047239066	Cbr4
ENSMUSG00000027820	920.2084616	-0.576102333	0.22745013	-2.532873173	0.011313188	0.047252588	Mme
ENSMUSG00000029171	1647.301208	-0.212145897	0.08375397	-2.53296528	0.011310215	0.047252588	Pgm1
ENSMUSG00000039031	1057.24253	-0.451305021	0.178177311	-2.532898372	0.011312375	0.047252588	Ahrgap18
ENSMUSG00000020600	23.86239191	-1.032743583	0.407767487	-2.532677604	0.011319501	0.047266278	Slc7a15
ENSMUSG00000028309	1139.899852	-0.348360053	0.137647349	-2.530815564	0.011379767	0.047492455	Rnf20
ENSMUSG00000034168	495.7998393	-0.332935516	0.13157413	-2.53040257	0.011393172	0.047510199	Irf2bpl
ENSMUSG000000096145	121.292406	-0.503596659	0.19901148	-2.530490496	0.011390317	0.047510199	Vkorc1
ENSMUSG00000007411	1284.224632	-0.222355608	0.087915745	-2.529189842	0.011432617	0.047661922	Mark3
ENSMUSG00000025967	14988.34571	-0.242143791	0.095745561	-2.529034133	0.01143769	0.047670309	Eef1b2
ENSMUSG00000033526	714.7240804	-0.294071022	0.116294799	-2.528668723	0.011449604	0.047694431	Ppip5k1
ENSMUSG00000028212	299.1282949	-0.387315595	0.15324337	-2.527454174	0.011489282	0.047846912	Ccne2
ENSMUSG00000022234	6453.252956	-0.186073711	0.073626405	-2.527268728	0.011495351	0.047859246	Cct5
ENSMUSG00000098905	171.0800483	-0.499968069	0.197836674	-2.527175872	0.011498391	0.047859246	Zfp953
ENSMUSG00000034620	526.2661649	-0.277856925	0.109972238	-2.526609719	0.011516941	0.047898046	Tmem5
ENSMUSG00000038167	204.9945964	-0.461084737	0.182513427	-2.526305838	0.011526908	0.0479267	Plekhhg6
ENSMUSG00000034403	1311.832461	-0.227143176	0.089964837	-2.524799517	0.011576431	0.048106914	Pja1
ENSMUSG00000029106	2237.39049	-0.186410023	0.073923199	-2.521671471	0.011679873	0.048476328	Add1
ENSMUSG00000024576	8197.467626	-0.198017642	0.078548219	-2.520969217	0.011703209	0.048556	Csnk1a1
ENSMUSG00000036241	1380.747562	-0.201484884	0.079939981	-2.520452004	0.011720422	0.048601516	Ube2r2
ENSMUSG00000027359	1054.267886	-0.235852115	0.093582306	-2.520263988	0.011726685	0.04861454	Slc27a2
ENSMUSG00000047735	1131.468187	-0.493726263	0.195937919	-2.519809668	0.011741831	0.048664372	Samd9l
ENSMUSG00000097954	39.61657736	-0.834463511	0.33124211	-2.519195136	0.011762345	0.048723457	Gm4217
ENSMUSG00000038020	82.51749122	-0.551270755	0.21889246	-2.518454744	0.011787103	0.048813027	Rapgef11
ENSMUSG00000014606	1545.471472	-0.212270426	0.084299535	-2.518049783	0.011800664	0.048856192	Slc25a11
ENSMUSG00000031937	254.3291219	-0.324886078	0.129037038	-2.51777384	0.011809913	0.048881486	Vstm5
ENSMUSG00000009394	23.33495545	-0.925570339	0.367701646	-2.5172258	0.011829919	0.048938275	Syn2



ENSMUSG00000025762	757.0364602	-0.373183304	0.148305818	-2.516309265	0.011859107	0.049019951	Larp1b
ENSMUSG00000081093	175.8578131	-0.408377004	0.162338119	-2.51472588	0.011883156	0.049106321	Gm12565
ENSMUSG00000109901	590.5433029	-0.288737504	0.114818679	-2.51472588	0.011912497	0.049188407	Chmp1b
ENSMUSG00000036352	513.9009356	-0.336557892	0.133902147	-2.513461502	0.011955283	0.049325836	Ubac1
ENSMUSG00000020961	525.8171048	-0.397141869	0.158012224	-2.513361676	0.011958666	0.049326172	Ston2
ENSMUSG00000026696	280.3090155	-0.442050898	0.175944682	-2.512442503	0.011989864	0.049429223	Vamp4
ENSMUSG00000017057	711.097264	-0.494262545	0.196768085	-2.511904028	0.012008174	0.04948038	Il13ra1
ENSMUSG00000050900	313.3654332	-0.331725977	0.132067194	-2.511796966	0.012011817	0.049480426	Gm7327
ENSMUSG00000049184	19.82170455	-1.027654017	0.409336755	-2.510534429	0.012054857	0.049631458	Purg
ENSMUSG00000098217	65.44280107	-0.671554116	0.267490157	-2.510575052	0.01205347	0.049631458	Gm27046
ENSMUSG00000059447	323.8169939	-0.347126	0.138274162	-2.51041839	0.012058819	0.049634648	Hadhb
ENSMUSG00000032396	473.1241099	-0.291200218	0.116099004	-2.508205993	0.01213459	0.049920134	Dis3l
ENSMUSG00000036398	428.7908747	-0.270047959	0.107678756	-2.507903787	0.012144973	0.04994965	Ppp1r11
ENSMUSG00000033282	157.350466	-0.441359035	0.176021764	-2.507411717	0.012161896	0.04999297	Rpgrip1l

Table S5 Upregulated genes in small intestinal tumors from H2B/p53ΔIEC compared to adjacent non-tumor tissue

gene_id	baseMean	log2FoldChange	lfcSE	stat	pvalue	padj	symbol
ENSMUSG00000044217	5953.987102	9.537386784	0.49781653	19.15843731	8.23075E-82	1.9553E-77	Aqp5
ENSMUSG00000023886	9023.322217	3.229108539	0.174710411	18.48263378	2.84927E-76	3.38436E-72	Smoc2
ENSMUSG00000000983	4235.579894	9.017322467	0.564679419	15.96892355	2.10385E-57	1.66597E-53	Wfdc18
ENSMUSG00000026579	960.8588864	5.845061215	0.368106893	15.87870621	8.89952E-57	5.28542E-53	F5
ENSMUSG00000000031	20777.27113	7.55218886	0.484789422	15.57828724	1.02258E-54	4.85849E-51	H19
ENSMUSG00000034463	2302.374525	5.176930708	0.332951484	15.54860382	1.62612E-54	6.43836E-51	Scara3
ENSMUSG00000029304	5049.900815	7.814111523	0.506896824	15.41558589	1.28599E-53	4.36429E-50	Spp1
ENSMUSG00000004552	4255.737901	6.928294959	0.458230749	15.11966401	1.20154E-51	3.56798E-48	Ctse
ENSMUSG00000043924	353.355478	4.966479195	0.328655394	15.11150975	1.35988E-51	3.58948E-48	Ncmmap
ENSMUSG00000051397	424.5854534	6.296223765	0.425054388	14.81274855	1.21182E-49	2.8788E-46	Tacstd2
ENSMUSG00000048191	8315.05719	9.155447323	0.632654753	14.47147482	1.83495E-47	3.96283E-44	Muc6
ENSMUSG00000032068	2494.848352	5.089044896	0.359239052	14.1661795	1.48355E-45	2.71101E-42	Plet1
ENSMUSG00000038775	1588.704114	4.252928834	0.300183278	14.16777399	1.45025E-45	2.71101E-42	Vill
ENSMUSG00000007682	937.7462915	7.263285913	0.514718985	14.11116769	3.24166E-45	5.50063E-42	Dio2
ENSMUSG00000027376	390.7479951	6.923324166	0.493349735	14.03329865	9.75085E-45	1.54427E-41	Prom2
ENSMUSG00000039452	218.7092354	4.578846507	0.327200714	13.99399913	1.696E-44	2.51814E-41	Snx22
ENSMUSG00000017491	444.9198136	3.946078923	0.284452392	13.87254611	9.2919E-44	1.29846E-40	Rarb
ENSMUSG00000023906	498.919273	9.302364861	0.682421966	13.63139717	2.60544E-42	3.4386E-39	Cldn6
ENSMUSG00000042734	544.1349619	4.638720287	0.34141808	13.58662754	4.80726E-42	6.01059E-39	Ttc9
ENSMUSG000000073764	711.7813951	7.962769587	0.594950517	13.38391911	7.50817E-41	8.9182E-38	Gm12888
ENSMUSG00000074480	326.9119604	4.07596659	0.306568329	13.29545882	2.4596E-40	2.78239E-37	Mex3a
ENSMUSG00000030048	5865.993033	9.236729167	0.698318413	13.22710241	6.12017E-40	6.60867E-37	Gkn3
ENSMUSG00000076431	1540.323839	2.849237431	0.215497011	13.22170279	6.57582E-40	6.79197E-37	Sox4
ENSMUSG00000020218	2514.305386	7.52021732	0.570998206	13.17029939	1.30081E-39	1.28758E-36	Wif1
ENSMUSG00000067276	737.7220772	5.886282376	0.448050608	13.13753909	2.00647E-39	1.90662E-36	Capn6
ENSMUSG00000022754	472.602942	4.366838018	0.338983269	12.88216386	5.67226E-38	5.1827E-35	Tmem45a
ENSMUSG00000031595	334.7212228	5.110147085	0.398470975	12.82438973	1.19726E-37	1.05341E-34	Pdgfrl
ENSMUSG00000037095	5051.638488	4.099655917	0.319915316	12.81481603	1.35459E-37	1.14928E-34	Lrg1
ENSMUSG00000026249	3253.924704	4.679594127	0.366164908	12.78001802	2.1202E-37	1.73681E-34	Serpine2
ENSMUSG000000073599	1274.675772	3.316058204	0.259657088	12.77091347	2.38341E-37	1.88734E-34	Eccsr
ENSMUSG00000000957	5992.580618	2.778193755	0.219531799	12.65508581	1.04861E-36	8.03573E-34	Mmp14
ENSMUSG00000007888	419.3931148	6.438857337	0.508975449	12.65062459	1.10989E-36	8.23954E-34	Crlf1
ENSMUSG00000029463	354.1093465	2.584167333	0.205489365	12.57567436	2.87338E-36	2.06848E-33	Fam216a
ENSMUSG00000031430	358.6545614	8.783058342	0.701733459	12.51623139	6.08567E-36	4.25209E-33	Vsig1
ENSMUSG00000032473	1148.984431	9.000321611	0.721081841	12.48169223	9.3968E-36	6.37801E-33	Cldn18
ENSMUSG00000017897	386.7889714	5.089611732	0.414545125	12.27758191	1.19517E-34	7.88681E-32	Eya2
ENSMUSG00000032717	484.3482849	4.459463213	0.363354145	12.27304896	1.26402E-34	8.1157E-32	Mdfl
ENSMUSG00000023987	525.2660341	8.739130172	0.719766937	12.14161102	6.35621E-34	3.97363E-31	Pgc
ENSMUSG00000040165	293.7953902	3.486554161	0.290676538	11.99461842	3.7916E-33	2.30957E-30	Cd209c
ENSMUSG000000025432	1233.172977	3.224149413	0.27016166	11.93414865	7.85585E-33	4.5518E-30	Avil
ENSMUSG00000038295	319.8396912	5.045551963	0.423032796	11.92709408	8.55065E-33	4.83641E-30	Atg9b
ENSMUSG00000031635	414.2103281	8.818051656	0.741579316	11.89090832	1.31964E-32	7.29053E-30	Anxa10
ENSMUSG00000045027	374.25093	5.67750456	0.479471658	11.84116823	2.39099E-32	1.27035E-29	Prss22
ENSMUSG00000052212	20123.37741	6.447893344	0.545025378	11.83044606	2.71694E-32	1.40312E-29	Cd177
ENSMUSG00000004371	684.9732189	5.718615086	0.484833308	11.79501281	4.14138E-32	2.09325E-29	Il11
ENSMUSG00000025534	2379.827294	2.128766446	0.180695467	11.78096209	4.89313E-32	2.42169E-29	Gusb
ENSMUSG00000046402	1197.66616	3.949020049	0.336349746	11.74081473	7.87244E-32	3.81669E-29	Rbp1
ENSMUSG00000018907	382.5476371	7.171088655	0.611256256	11.73172231	8.76567E-32	4.16474E-29	Alox12e
ENSMUSG00000026450	485.2855853	7.239364129	0.619993478	11.67651659	1.68042E-31	7.82745E-29	Chit1
ENSMUSG00000058952	3205.659244	6.5675684	0.562595666	11.67369177	1.73718E-31	7.93622E-29	Cfi
ENSMUSG00000013338	287.8107899	5.199888969	0.447750353	11.61336654	3.5246E-31	1.55056E-28	Fer1l4
ENSMUSG00000015090	144.7810286	5.691917414	0.491309046	11.58520784	4.89777E-31	2.11548E-28	Ptgds
ENSMUSG00000023972	2037.369998	3.082676722	0.267280287	11.53349825	8.94342E-31	3.79393E-28	Ptk7
ENSMUSG00000030050	263.990779	8.361534861	0.725700012	11.52202662	1.02179E-30	4.25854E-28	Gkn1
ENSMUSG00000044303	784.3635604	6.378596323	0.557320234	11.44511887	2.48763E-30	1.0189E-27	Cdkn2a
ENSMUSG00000026442	652.4420191	3.108324804	0.27929869	11.12903466	9.06115E-29	3.58761E-26	Nfasc
ENSMUSG00000000296	563.4943646	3.888042087	0.350261772	11.10038948	1.24898E-28	4.86408E-26	Tpd52l1
ENSMUSG00000063455	211.1600814	3.183549352	0.288456876	11.0364828	2.54813E-28	9.76346E-26	D630045J12Rik
ENSMUSG00000024032	884.1159736	8.858986644	0.806514625	10.98428518	4.54825E-28	1.70034E-25	Tff1
ENSMUSG00000044338	205.7049986	5.075616055	0.462106875	10.98364107	4.5808E-28	1.70034E-25	Aplnr
ENSMUSG00000029379	653.2282126	7.626071052	0.694472769	10.98109443	4.7118E-28	1.72206E-25	Cxcl3
ENSMUSG00000049866	1236.536623	3.429449792	0.315330468	10.87573241	1.50443E-27	5.3342E-25	Arl4c
ENSMUSG00000031098	449.8153699	4.830711628	0.444400398	10.87017845	1.59888E-27	5.58573E-25	Syt8
ENSMUSG00000017493	15668.19906	3.483337329	0.321897415	10.82126531	2.72982E-27	9.13376E-25	Igfbp4
ENSMUSG00000045349	238.9259781	3.852881519	0.357227167	10.78552214	4.02948E-27	1.32951E-24	Sh2d5

ENSMUSG00000041012	210.4051126	4.006647323	0.372135239	10.76664315	4.94711E-27	1.60991E-24	Cmtm8
ENSMUSG00000037813	434.1102012	4.800808066	0.446116837	10.76132453	5.24114E-27	1.68255E-24	D630003M21Rik
ENSMUSG00000025746	468.6951199	6.330512414	0.589130342	10.74552093	6.22097E-27	1.92246E-24	Il6
ENSMUSG00000020431	570.4276537	3.938532583	0.366615403	10.74295447	6.39641E-27	1.94812E-24	Adcy1
ENSMUSG00000026327	228.0713783	8.897639207	0.830637547	10.71181918	8.95839E-27	2.69387E-24	Serpinb11
ENSMUSG00000062184	136.5735951	5.033464922	0.47027531	10.70323025	9.82908E-27	2.91875E-24	Hs6st2
ENSMUSG00000013275	1204.404555	2.580939877	0.24153637	10.68551241	1.1899E-26	3.44723E-24	Slc41a1
ENSMUSG00000060188	82.96716978	6.797914947	0.637048935	10.67094625	1.39201E-26	3.98418E-24	Cxcl17
ENSMUSG00000025921	2508.769662	2.189992936	0.205726372	10.64517357	1.83642E-26	5.19356E-24	Rdh10
ENSMUSG00000073433	276.6234612	3.896395279	0.36635986	10.63543172	2.03882E-26	5.63189E-24	Arhgdig
ENSMUSG00000038572	1993.294207	8.685767901	0.820442617	10.58668543	3.43542E-26	9.27406E-24	Bpifb5
ENSMUSG00000029913	109.0862258	2.496275595	0.235866245	10.58343721	3.55666E-26	9.49349E-24	Prdm5
ENSMUSG00000025330	204.6471755	4.527159911	0.430279383	10.52144279	6.88117E-26	1.81632E-23	Padi4
ENSMUSG00000028626	543.9103431	4.478001666	0.426120019	10.5087803	7.87048E-26	2.05463E-23	Col9a2
ENSMUSG00000073987	1903.177844	3.924281323	0.374907992	10.4673184	1.22052E-25	3.10414E-23	Ggh
ENSMUSG00000097604	240.810593	5.121463146	0.490576791	10.4396768	1.63366E-25	4.04263E-23	NA
ENSMUSG00000042268	242.2705244	8.067309783	0.781044989	10.32886696	5.21732E-25	1.27776E-22	Slc26a9
ENSMUSG00000022440	1546.522116	3.724726797	0.362238854	10.28251595	8.44927E-25	2.02748E-22	C1qtnf6
ENSMUSG00000050295	224.1480621	4.459304851	0.434331451	10.26705489	9.91864E-25	2.35627E-22	Foxc1
ENSMUSG00000000202	142.0313423	6.071330669	0.593609865	10.22781295	1.48843E-24	3.5009E-22	Btbd17
ENSMUSG00000022871	631.9149155	6.318141857	0.618499741	10.21527001	1.69407E-24	3.94552E-22	Fetub
ENSMUSG000000072964	269.6231434	2.167937865	0.21228755	10.2122704	1.74728E-24	4.02993E-22	Bhlhb9
ENSMUSG00000066705	2313.032348	2.258978302	0.221576274	10.19503694	2.08665E-24	4.76639E-22	Fxyd6
ENSMUSG00000024736	549.2300395	3.06806739	0.301194649	10.18632769	2.28223E-24	5.16349E-22	Tmem132a
ENSMUSG00000102278	118.777085	3.439132269	0.338100179	10.17193271	2.64605E-24	5.93016E-22	NA
ENSMUSG00000032940	115.1855995	3.57593249	0.352029601	10.1580449	3.05134E-24	6.71181E-22	Rbm11
ENSMUSG00000009356	114.2124358	6.217422373	0.61562943	10.09929361	5.56415E-24	1.21268E-21	Lpo
ENSMUSG00000026566	2667.389824	2.23193705	0.221585534	10.07257565	7.30398E-24	1.57739E-21	Mpz1
ENSMUSG00000040187	175.9684718	2.576115342	0.256544012	10.04161166	1.00026E-23	2.12163E-21	Arntl2
ENSMUSG00000031661	5352.033512	4.289908673	0.427461919	10.03576806	1.0613E-23	2.23118E-21	Nkd1
ENSMUSG00000043430	182.6616044	8.022024035	0.803874117	9.979204293	1.87968E-23	3.84946E-21	Psap1
ENSMUSG000000040714	380.844575	3.977869066	0.399829275	9.948918991	2.54937E-23	5.13245E-21	Klc3
ENSMUSG00000053580	682.8087906	2.091208865	0.210592073	9.930140478	3.07822E-23	6.09384E-21	Tanc2
ENSMUSG00000010175	1470.388146	4.374779276	0.440769882	9.925313545	3.23086E-23	6.34316E-21	Prox1
ENSMUSG00000029247	2523.899352	1.865656816	0.188023689	9.922456165	3.32472E-23	6.47394E-21	Paics
ENSMUSG00000043903	300.5033758	5.374645365	0.542314596	9.910567413	3.74513E-23	7.23328E-21	NA
ENSMUSG00000016942	96.36674505	5.615765665	0.568004363	9.886835435	4.748E-23	9.02348E-21	Tmprss6
ENSMUSG00000054196	88.50866456	5.274838627	0.53465153	9.865937591	5.84855E-23	1.10268E-20	Cthrc1
ENSMUSG00000024968	187.4101816	2.686239231	0.272559073	9.855622141	6.4814E-23	1.21238E-20	Rcor2
ENSMUSG00000018623	22997.29305	4.312242906	0.439054459	9.821658375	9.08367E-23	1.68587E-20	Mmp7
ENSMUSG00000036264	169.471803	2.991950731	0.304883878	9.813410752	9.8579E-23	1.81538E-20	Fstl4
ENSMUSG000000041592	343.0349355	2.696091469	0.274804825	9.81093206	1.01031E-22	1.84623E-20	Sdk2
ENSMUSG00000038067	343.4633301	5.270199963	0.539213949	9.773856872	1.45794E-22	2.62385E-20	Csf3
ENSMUSG00000055945	142.1629552	4.729607308	0.483975351	9.772413605	1.47886E-22	2.64149E-20	Prr18
ENSMUSG00000026167	188.9603106	6.724122237	0.690974867	9.731355734	2.21619E-22	3.89984E-20	Wnt10a
ENSMUSG00000040473	101.1778528	2.412917517	0.248844513	9.696486721	3.12059E-22	5.45094E-20	Cfap69
ENSMUSG00000022176	117.2422283	5.149667983	0.53171393	9.685034929	3.49089E-22	6.05326E-20	Rem2
ENSMUSG00000029359	1099.920931	5.819156425	0.600974237	9.682871683	3.56557E-22	6.13795E-20	Tesc
ENSMUSG00000031841	1030.837079	3.770124218	0.390063728	9.665405789	4.2294E-22	7.22833E-20	Cdh13
ENSMUSG00000025650	1009.958476	4.206036482	0.435350375	9.661267613	4.40381E-22	7.47263E-20	Col7a1
ENSMUSG00000022382	106.1105109	5.903123661	0.611533018	9.652992541	4.77418E-22	8.04365E-20	Wnt7b
ENSMUSG00000035613	214.623414	7.756932402	0.803839432	9.649853061	4.92262E-22	8.23534E-20	NA
ENSMUSG00000022226	106.498168	7.589834566	0.789373213	9.615014089	6.90999E-22	1.13996E-19	Mcpt2
ENSMUSG00000037254	158.0254846	6.960145988	0.723965104	9.613924695	6.98352E-22	1.14414E-19	Itih2
ENSMUSG00000091055	98.660401	8.058952902	0.838984974	9.605598614	7.57167E-22	1.232E-19	Siglec15
ENSMUSG00000038227	338.4744797	5.908950684	0.615467971	9.600744419	7.93691E-22	1.28265E-19	Hoxa9
ENSMUSG00000025854	784.1434223	3.346479772	0.349001647	9.588721998	8.91828E-22	1.4219E-19	Fam20c
ENSMUSG00000025473	1562.121745	4.528453828	0.472413495	9.585784229	9.17579E-22	1.4532E-19	Adam8
ENSMUSG00000079330	127.3805036	5.0879739	0.531854293	9.566480835	1.10607E-21	1.71737E-19	Lemdl
ENSMUSG00000023011	1723.747479	4.574852933	0.478373482	9.563349776	1.14006E-21	1.75865E-19	Faim2
ENSMUSG00000051076	199.8171406	5.639501628	0.589878932	9.560439141	1.17258E-21	1.79715E-19	Vtcn1
ENSMUSG00000038718	563.0873265	1.761047301	0.184472716	9.546383547	1.34303E-21	2.04519E-19	Pbx3
ENSMUSG00000041189	790.0285005	3.103090176	0.325379349	9.53683811	1.47253E-21	2.22812E-19	Chrnbl
ENSMUSG00000058755	337.0193112	5.488401716	0.575767179	9.532328202	1.53795E-21	2.31237E-19	Osm
ENSMUSG00000032719	794.2106453	5.736033285	0.602772055	9.516090266	1.79817E-21	2.68663E-19	Sbspon
ENSMUSG00000006587	89.6847723	3.293365967	0.346169569	9.513736215	1.83935E-21	2.73097E-19	Snai3
ENSMUSG00000026475	424.2325237	4.411100459	0.464877607	9.48873508	2.33855E-21	3.45059E-19	Rgs16

ENSMUSG00000073408	67.82115043	6.210923174	0.656172286	9.465384786	2.92482E-21	4.28902E-19	Dpcr1
ENSMUSG00000049521	1466.308569	2.696702603	0.286055937	9.427186287	4.21237E-21	6.13921E-19	Cdc42ep1
ENSMUSG00000001864	461.805852	4.034970871	0.428061629	9.426144736	4.25439E-21	6.15303E-19	Aif1l
ENSMUSG00000030980	1594.740096	1.847389451	0.195995544	9.425670682	4.27366E-21	6.15303E-19	Knop1
ENSMUSG00000060487	106.1802178	3.857520596	0.409650197	9.41662087	4.65839E-21	6.66654E-19	Samd5
ENSMUSG00000032180	404.9586982	1.912355041	0.203427522	9.400670202	5.42166E-21	7.66649E-19	Tmed1
ENSMUSG00000045518	90.56790078	4.068608256	0.43290414	9.398404595	5.53966E-21	7.787E-19	Onecut3
ENSMUSG00000050578	1891.7156	4.264479803	0.455029898	9.371867266	7.12605E-21	9.95803E-19	Mmp13
ENSMUSG00000072944	132.7651534	6.511241619	0.695038358	9.368175929	7.37968E-21	1.01925E-18	Nup62cl
ENSMUSG00000049723	712.1133206	4.451063367	0.47551604	9.360490488	7.93674E-21	1.08986E-18	Mmp12
ENSMUSG00000002308	423.0816135	2.669450903	0.285206024	9.359728335	7.9942E-21	1.09144E-18	Cd320
ENSMUSG00000032036	124.0086289	5.18177833	0.555149065	9.334030544	1.0192E-20	1.37568E-18	Kirrel3
ENSMUSG00000003541	2101.683097	2.786923638	0.298832702	9.326033006	1.09908E-20	1.46684E-18	Ier3
ENSMUSG00000097651	157.7543686	4.894416389	0.525189094	9.319341248	1.17065E-20	1.55363E-18	4930461G14Rik
ENSMUSG00000007908	106.5657802	3.504426654	0.376741498	9.301939594	1.37907E-20	1.80006E-18	Hmgcll1
ENSMUSG00000048583	4316.588913	4.354303424	0.46981502	9.268123057	1.8945E-20	2.45933E-18	Igf2
ENSMUSG00000070803	720.9123403	3.527959243	0.381664779	9.24360706	2.38325E-20	3.07698E-18	Cited4
ENSMUSG00000000320	234.8670962	4.069069515	0.44297754	9.185724205	4.08767E-20	5.22079E-18	Alox12
ENSMUSG00000026147	619.6502347	6.713953487	0.731129626	9.182986499	4.19298E-20	5.3164E-18	Col9a1
ENSMUSG00000041789	98.8217243	6.996448062	0.765143928	9.143963391	6.02045E-20	7.56729E-18	2700046A07Rik
ENSMUSG00000031097	85.81010311	3.912095728	0.429314275	9.11242871	8.0558E-20	1.00059E-17	Tnni2
ENSMUSG00000002464	955.0484098	2.69963401	0.296272058	9.112010178	8.08695E-20	1.00059E-17	Iffo2
ENSMUSG00000030796	800.3009898	3.776535539	0.415804762	9.082473043	1.06135E-19	1.29967E-17	Tead2
ENSMUSG00000044024	97.92347039	3.119942814	0.343681297	9.078011637	1.10576E-19	1.3471E-17	Rell2
ENSMUSG00000033770	58.00556016	6.579890952	0.726421429	9.057952714	1.32922E-19	1.61107E-17	Clcnka
ENSMUSG00000032965	345.915274	2.344297636	0.258963052	9.052633639	1.39561E-19	1.68295E-17	Ift57
ENSMUSG00000041886	249.608925	3.528179357	0.38985067	9.050078982	1.42865E-19	1.70548E-17	Macc1
ENSMUSG00000030510	116.9480136	5.543162426	0.612647651	9.047880002	1.45771E-19	1.72285E-17	Cers3
ENSMUSG00000037613	348.4222433	3.218050282	0.35587387	9.042670874	1.5289E-19	1.79804E-17	Tnfrsf23
ENSMUSG00000042179	6190.705149	7.167878017	0.792858568	9.040550615	1.55885E-19	1.82423E-17	Pnliprp1
ENSMUSG00000043068	216.2926843	4.723633112	0.522821589	9.034885343	1.64174E-19	1.91183E-17	Fam89a
ENSMUSG000000022464	1658.610016	5.95255627	0.65907871	9.031631848	1.69131E-19	1.95993E-17	Slc38a4
ENSMUSG00000007039	701.7145001	2.988816681	0.33133842	9.020435	1.87344E-19	2.16046E-17	Ddah2
ENSMUSG00000050493	47.55799262	4.769197735	0.528913518	9.016970773	1.93362E-19	2.21909E-17	Fam167b
ENSMUSG00000110618	55.5736216	3.862431359	0.431652662	8.948007737	3.61956E-19	4.03691E-17	NA
ENSMUSG00000032496	5593.635168	5.610398682	0.627209675	8.945012979	3.71906E-19	4.1285E-17	Ltf
ENSMUSG00000100733	58.48436558	5.719481434	0.641112703	8.921179393	4.61349E-19	5.09758E-17	4933416M06Rik
ENSMUSG00000031904	805.9214147	2.001551669	0.224406009	8.919331892	4.6911E-19	5.13556E-17	Slc7a6
ENSMUSG00000033805	110.0922965	4.542438403	0.509276186	8.919400768	4.68818E-19	5.13556E-17	Ephx4
ENSMUSG00000044716	238.8080182	3.421083519	0.383612043	8.918081634	4.74435E-19	5.17003E-17	Dok7
ENSMUSG00000045288	151.8078442	5.447424905	0.610966004	8.916085128	4.83062E-19	5.24001E-17	Ush1g
ENSMUSG000000020140	1553.510637	3.36491145	0.377973834	8.902498396	5.46035E-19	5.84306E-17	Lgr5
ENSMUSG00000037568	145.8765996	3.467273943	0.389817685	8.894604003	5.8628E-19	6.24559E-17	Vash2
ENSMUSG00000042784	183.9466126	3.662835097	0.413672117	8.854440377	8.41047E-19	8.87996E-17	Muc1
ENSMUSG00000029829	326.6523771	6.583665964	0.744090616	8.847935752	8.91529E-19	9.37132E-17	Tmem213
ENSMUSG00000040433	1365.297478	1.767743032	0.199997881	8.838808829	9.67445E-19	1.00801E-16	Zbtb38
ENSMUSG00000048078	1103.264651	3.983612748	0.451867592	8.81588505	1.18743E-18	1.21589E-16	Tenm4
ENSMUSG00000037716	64.34991475	4.805677883	0.54546119	8.810302124	1.24809E-18	1.27252E-16	Ccdc33
ENSMUSG00000022483	680.341197	6.802595166	0.772317578	8.808028407	1.27366E-18	1.29304E-16	Col2a1
ENSMUSG00000022178	731.8131551	2.965648706	0.337225152	8.794269025	1.43982E-18	1.45551E-16	Ajuba
ENSMUSG00000037188	108.6149497	4.534968126	0.516110516	8.786815965	1.53859E-18	1.54876E-16	Grhl3
ENSMUSG00000038400	3229.870083	2.376311711	0.270455656	8.786326537	1.5453E-18	1.54895E-16	Pmepa1
ENSMUSG00000008398	1230.72075	2.622979541	0.298825043	8.777642985	1.66936E-18	1.66628E-16	Elk3
ENSMUSG00000031379	310.1916109	2.142272151	0.244429232	8.764386052	1.87797E-18	1.8595E-16	Pir
ENSMUSG00000037736	651.9536579	2.79379905	0.319531955	8.743410487	2.26177E-18	2.18417E-16	Limch1
ENSMUSG00000026494	422.703989	3.245271356	0.372356679	8.715491188	2.89501E-18	2.762E-16	Kif26b
ENSMUSG00000027257	738.4651393	3.206345995	0.367924818	8.714677132	2.91588E-18	2.77079E-16	Pacsin3
ENSMUSG00000053367	114.9783315	7.332578627	0.842931364	8.698903542	3.35106E-18	3.15904E-16	Gm6792
ENSMUSG00000062661	284.5645492	2.190274891	0.252139451	8.686759974	3.72923E-18	3.50164E-16	Ncs1
ENSMUSG00000024028	702.2449675	6.746165336	0.776886614	8.683590648	3.83467E-18	3.58647E-16	Tff2
ENSMUSG000000007029	4944.125936	1.511726602	0.174285424	8.673855584	4.1773E-18	3.86132E-16	Vars
ENSMUSG00000043613	1093.276727	5.075896037	0.58538839	8.670988562	4.28385E-18	3.94446E-16	Mmp3
ENSMUSG00000028347	338.9613691	3.335065344	0.384660229	8.670159003	4.31517E-18	3.95796E-16	Tmeff1
ENSMUSG00000017724	737.7261296	4.526952397	0.522436787	8.665072048	4.51228E-18	4.12283E-16	Etv4
ENSMUSG00000026600	1731.667774	2.002412005	0.231300709	8.657180561	4.83576E-18	4.40147E-16	Soat1
ENSMUSG00000039238	106.2254554	4.786273914	0.554209933	8.636210986	5.81081E-18	5.26877E-16	Zfp750
ENSMUSG00000006411	326.6489012	3.333404874	0.386137157	8.632696471	5.99223E-18	5.4126E-16	Nectin4

ENSMUSG00000046841	2446.272205	2.709081272	0.313836535	8.632141117	6.0214E-18	5.41835E-16	Ckap4
ENSMUSG00000001053	460.1369115	2.632741406	0.305012329	8.631590119	6.05049E-18	5.42398E-16	N4bp3
ENSMUSG00000037962	257.9918997	5.166952406	0.598777962	8.629162616	6.18028E-18	5.49883E-16	Rflna
ENSMUSG00000058908	7083.829651	4.130614109	0.478680121	8.629174111	6.17966E-18	5.49883E-16	Pla2g2a
ENSMUSG00000018417	1487.627702	1.995649493	0.231361482	8.625677333	6.37144E-18	5.62677E-16	Myo1b
ENSMUSG00000046550	65.7111362	3.081727794	0.357313675	8.624712705	6.42538E-18	5.65338E-16	Spin2c
ENSMUSG00000032898	872.8402177	1.678383588	0.194859337	8.613308517	7.09817E-18	6.2223E-16	Fbxo21
ENSMUSG00000041608	363.8242283	2.815385658	0.327123452	8.606492879	7.53298E-18	6.57917E-16	Entpd3
ENSMUSG00000024538	1305.307056	3.459899148	0.40215857	8.603320685	7.74422E-18	6.73889E-16	Ppic
ENSMUSG00000022227	84.20305421	7.138815645	0.830380882	8.597037573	8.18002E-18	7.09214E-16	Mcpt1
ENSMUSG00000005087	4365.353226	2.820088193	0.328547225	8.583509398	9.20218E-18	7.92054E-16	Cd44
ENSMUSG00000024526	161.3205419	3.684706795	0.429684575	8.575376004	9.87636E-18	8.45986E-16	Cidea
ENSMUSG00000044033	549.319629	3.56687635	0.415957357	8.575101001	9.89999E-18	8.45986E-16	Ccdc141
ENSMUSG00000055333	70.55715517	4.499957586	0.524930786	8.572477944	1.01282E-17	8.62383E-16	Fat2
ENSMUSG00000029368	905.862712	6.394098715	0.746853387	8.561384106	1.1152E-17	9.42805E-16	Alb
ENSMUSG00000009628	77.73411243	4.02609211	0.471125454	8.545690069	1.2777E-17	1.07255E-15	Tex15
ENSMUSG00000003363	2545.59299	2.250598963	0.263475645	8.541962068	1.31962E-17	1.09996E-15	Pld3
ENSMUSG00000030873	40.92626811	4.787835702	0.56102137	8.534141411	1.412E-17	1.16876E-15	Scnn1b
ENSMUSG00000026556	293.5465669	3.051841125	0.357718139	8.531412837	1.44571E-17	1.19251E-15	Vangl2
ENSMUSG00000028445	451.8488323	4.00539272	0.470101411	8.520273769	1.59177E-17	1.30844E-15	Enho
ENSMUSG00000019853	491.9125651	3.445127834	0.404369402	8.519754001	1.59893E-17	1.3098E-15	Hebp2
ENSMUSG000000059991	2489.720215	5.251778199	0.617604302	8.503467642	1.8401E-17	1.49703E-15	Nptx2
ENSMUSG00000047139	10046.63693	2.54340039	0.299191906	8.500899718	1.88127E-17	1.5253E-15	Cd24a
ENSMUSG00000052221	57.52499852	3.939480058	0.46364232	8.496808614	1.94874E-17	1.57464E-15	Ppp1r36
ENSMUSG00000035557	680.1230507	5.528609015	0.651790538	8.482186668	2.21001E-17	1.77368E-15	Krt17
ENSMUSG00000041423	131.0020722	3.630571761	0.430361397	8.436099948	3.28102E-17	2.62438E-15	Paqr6
ENSMUSG00000038740	1030.166236	2.097198974	0.248656799	8.434110713	3.33731E-17	2.66044E-15	Mvb12b
ENSMUSG00000059336	261.1442229	4.2670703	0.506062805	8.431898685	3.40101E-17	2.70216E-15	Slc14a1
ENSMUSG00000110290	83.69359455	6.062121359	0.719975738	8.419896726	3.76816E-17	2.98388E-15	NA
ENSMUSG00000048776	78.062811	3.521645314	0.418659872	8.411709727	4.04077E-17	3.17856E-15	Pthlh
ENSMUSG00000029832	344.9275934	4.226742173	0.504141983	8.384031317	5.11452E-17	3.98362E-15	Nfe2l3
ENSMUSG000000107388	36.91299107	3.235349173	0.385963231	8.382532092	5.18011E-17	4.02152E-15	LOC105242579
ENSMUSG00000047910	85.20328445	2.755528887	0.329313669	8.367490174	5.88584E-17	4.52505E-15	Pcdhb16
ENSMUSG00000025082	238.9781252	4.790070647	0.572886525	8.361290485	6.20359E-17	4.75395E-15	Vwa2
ENSMUSG00000016024	1189.479404	3.609656611	0.432818689	8.33988157	7.4365E-17	5.62616E-15	Lbp
ENSMUSG00000034220	1616.824169	3.305583822	0.396449642	8.337966477	7.5579E-17	5.69986E-15	Gpc1
ENSMUSG00000038560	106.7205645	3.851946046	0.463253095	8.314992577	9.1758E-17	6.89811E-15	Sp6
ENSMUSG00000025171	432.6289143	1.765097625	0.212512285	8.305861569	9.90977E-17	7.40304E-15	Ubtd1
ENSMUSG00000024270	628.040356	1.944678309	0.234323591	8.299114489	1.0489E-16	7.8112E-15	Slc39a6
ENSMUSG00000013089	1725.953773	3.58261591	0.431980132	8.293473813	1.09988E-16	8.16525E-15	Etv5
ENSMUSG00000029086	17505.73252	3.426527716	0.413587471	8.284892444	1.18216E-16	8.74871E-15	Prom1
ENSMUSG00000037936	832.821559	1.994264944	0.240982242	8.275568063	1.27845E-16	9.43192E-15	Scarb1
ENSMUSG00000035638	122.1583883	5.657976701	0.68383182	8.273930136	1.29614E-16	9.53286E-15	Muc20
ENSMUSG00000010080	696.6980928	2.109963898	0.25523541	8.266736567	1.37676E-16	1.00945E-14	Epn3
ENSMUSG00000024253	185.9229304	2.407587376	0.291437713	8.261070092	1.44372E-16	1.05529E-14	Dync2li1
ENSMUSG00000074625	42.18413588	4.532199568	0.548924013	8.256515401	1.49987E-16	1.09297E-14	Arhgap40
ENSMUSG00000057092	3214.647443	3.778805184	0.458110378	8.248678415	1.60156E-16	1.1635E-14	Fxyd3
ENSMUSG00000005553	125.7921803	4.038229405	0.48974416	8.245589702	1.64348E-16	1.19032E-14	Atp4a
ENSMUSG00000022790	223.8250875	3.189459673	0.388825368	8.202807564	2.34837E-16	1.69054E-14	Igsf11
ENSMUSG00000025268	931.1456294	2.278215726	0.27781897	8.200360556	2.39667E-16	1.7201E-14	Maged2
ENSMUSG00000034486	60.43474414	5.479860254	0.6688933	8.192428085	2.56008E-16	1.83185E-14	Gbx2
ENSMUSG00000033307	2060.494047	2.413259983	0.294740283	8.187750798	2.66153E-16	1.89303E-14	Mif
ENSMUSG00000044976	52.82074488	5.7356962	0.701523616	8.176055756	2.93286E-16	2.07979E-14	Wdr72
ENSMUSG00000040711	1319.310243	2.358747385	0.289091881	8.159161649	3.37358E-16	2.3852E-14	Sh3pxd2b
ENSMUSG00000089762	267.4963525	2.880840188	0.354298916	8.13110076	4.2541E-16	2.97236E-14	Ier5l
ENSMUSG00000068740	297.5790239	2.579066232	0.317638498	8.119501399	4.68103E-16	3.25154E-14	Celsr2
ENSMUSG00000084939	1365.973656	4.350706154	0.536153294	8.114668335	4.87113E-16	3.36391E-14	NA
ENSMUSG00000005089	175.279786	3.301447974	0.406891486	8.113829082	4.90491E-16	3.37742E-14	Slc1a2
ENSMUSG00000050910	583.6772042	2.547491735	0.314106263	8.110286329	5.05006E-16	3.46732E-14	Cdr2l
ENSMUSG00000044229	233.2225268	2.129586332	0.263310661	8.087733035	6.07855E-16	4.16144E-14	Nxpe4
ENSMUSG00000078674	83.13011323	7.35909791	0.910677822	8.080901649	6.42896E-16	4.37612E-14	NA
ENSMUSG00000018924	295.5475404	4.547231898	0.563304506	8.072422374	6.8917E-16	4.66436E-14	Alox15
ENSMUSG00000070044	351.4664466	2.131548397	0.264476252	8.059507724	7.66023E-16	5.15514E-14	Fam149a
ENSMUSG00000032849	794.6100782	1.771835225	0.219902668	8.057361209	7.7959E-16	5.23162E-14	Abcc4
ENSMUSG00000092627	42.64483824	3.605112687	0.44763875	8.053620659	8.03801E-16	5.3789E-14	NA
ENSMUSG00000024810	1368.197663	2.937479089	0.364824334	8.05176305	8.16098E-16	5.44585E-14	Il33
ENSMUSG00000024330	982.759714	4.234826532	0.526026355	8.050597641	8.23907E-16	5.48256E-14	Col11a2



ENSMUSG00000032852	90.29209006	5.600330312	0.696058438	8.045776049	8.57006E-16	5.68688E-14	Rspo4
ENSMUSG00000035914	637.3147006	3.032230118	0.377215409	8.038457716	9.09762E-16	6.02014E-14	Cd276
ENSMUSG00000027272	185.2273245	1.790971655	0.222965282	8.032513583	9.54957E-16	6.30165E-14	Arl6
ENSMUSG00000053398	1497.915385	3.263666179	0.406332442	8.032009848	9.58887E-16	6.31006E-14	Phgdh
ENSMUSG00000041930	271.4409454	3.434306699	0.427915941	8.025657308	1.00984E-15	6.62699E-14	Fam222a
ENSMUSG00000021795	82.96183256	6.381735289	0.795610411	8.021181223	1.04733E-15	6.8541E-14	Sftpd
ENSMUSG00000058297	4837.271628	3.169144999	0.395133637	8.020438415	1.05368E-15	6.87674E-14	Spock2
ENSMUSG00000071847	1061.814319	4.157529288	0.518884067	8.012443532	1.12451E-15	7.2989E-14	Apcdd1
ENSMUSG00000067889	341.1820824	3.504883592	0.438139213	7.999474802	1.24951E-15	8.04427E-14	Sptbn2
ENSMUSG00000097494	178.9161125	3.761908033	0.471208106	7.983538445	1.42197E-15	9.11134E-14	4933406C10Rik
ENSMUSG00000075707	58.32649775	6.285235591	0.787541183	7.980834177	1.45348E-15	9.25705E-14	Dio3
ENSMUSG00000050635	51.74295474	5.936545691	0.744381283	7.975141006	1.52207E-15	9.61656E-14	Sprr2f
ENSMUSG00000030093	48.19201221	6.570439465	0.824214277	7.971761286	1.56429E-15	9.83101E-14	Wnt7a
ENSMUSG00000062937	893.6796986	2.069617552	0.259612589	7.971946048	1.56195E-15	9.83101E-14	Mtap
ENSMUSG00000066607	129.0982111	2.759041482	0.346717046	7.957617053	1.75384E-15	1.09643E-13	6030419C18Rik
ENSMUSG00000018822	92.75632291	3.141474032	0.395236958	7.948330669	1.89042E-15	1.17562E-13	Sfrp5
ENSMUSG00000027201	520.2389222	1.286959438	0.162072019	7.940663925	2.01102E-15	1.24411E-13	Myef2
ENSMUSG00000016526	175.1846149	3.521512038	0.443561354	7.939176861	2.03527E-15	1.25584E-13	Dyrk3
ENSMUSG00000027460	106.2118957	4.651976301	0.587144144	7.923056632	2.31742E-15	1.42255E-13	Angpt4
ENSMUSG00000087149	46.49937406	7.018760068	0.886740061	7.915239621	2.46777E-15	1.51094E-13	NA
ENSMUSG00000031530	507.9467652	2.724015355	0.344552471	7.905952164	2.65893E-15	1.61549E-13	Dusp4
ENSMUSG00000033149	934.0398065	2.011621869	0.254656785	7.899345251	2.80372E-15	1.69911E-13	Phldb2
ENSMUSG00000032607	531.1590939	3.098412059	0.392371331	7.896632125	2.8654E-15	1.73208E-13	Amt
ENSMUSG00000037145	4167.944195	3.697840985	0.468427194	7.894163776	2.92268E-15	1.75775E-13	2210407C18Rik
ENSMUSG00000092486	225.6077799	3.109196536	0.395651462	7.858422964	3.89E-15	2.31606E-13	2610524H06Rik
ENSMUSG00000032864	218.4298432	3.392060447	0.431998486	7.85201929	4.09392E-15	2.43138E-13	Rag2
ENSMUSG00000049551	183.7740579	3.946891395	0.503357177	7.84113464	4.46493E-15	2.63853E-13	Fzd9
ENSMUSG00000008734	917.3859301	2.550653474	0.326213537	7.818968826	5.32578E-15	3.13166E-13	Gprc5b
ENSMUSG00000024571	2137.564517	1.018541989	0.130301544	7.816806767	5.41802E-15	3.17804E-13	NA
ENSMUSG00000081683	214.1541095	5.569343474	0.712615495	7.815355563	5.48081E-15	3.20695E-13	Fzd10
ENSMUSG00000075302	71.18125058	2.743474769	0.351850847	7.797266339	6.32626E-15	3.69255E-13	Erich2
ENSMUSG00000057604	554.7879075	2.755135544	0.35373539	7.788690699	6.77071E-15	3.93264E-13	Lmcd1
ENSMUSG00000029644	50.02009685	5.230697542	0.672454078	7.778520071	7.33779E-15	4.24128E-13	Pdx1
ENSMUSG00000029380	467.131972	4.547283734	0.584659559	7.777660794	7.38778E-15	4.2495E-13	Cxcl1
ENSMUSG00000084372	27.85735116	3.778179615	0.486025678	7.7736214	7.62735E-15	4.36615E-13	NA
ENSMUSG00000046714	136.7037508	4.813296671	0.620590454	7.755995341	8.76532E-15	4.98156E-13	Foxc2
ENSMUSG00000047143	59.56244255	4.038139021	0.520647396	7.755995811	8.76529E-15	4.98156E-13	Dmrta2
ENSMUSG00000034586	3694.574437	2.609259441	0.336607974	7.751626948	9.07226E-15	5.11925E-13	Hid1
ENSMUSG00000032418	1213.691704	1.824011159	0.235401191	7.748521363	9.29687E-15	5.23357E-13	Me1
ENSMUSG00000058799	3180.968389	1.891892399	0.244230193	7.746349367	9.45721E-15	5.30676E-13	Nap111
ENSMUSG00000078161	155.5315422	4.52161185	0.583940671	7.743272688	9.68899E-15	5.41581E-13	Erich3
ENSMUSG00000037053	96.95142811	3.790972808	0.49148023	7.713378025	1.2253E-14	6.76938E-13	Azgp1
ENSMUSG00000034612	1064.372915	2.939069221	0.381281851	7.708390031	1.27415E-14	7.02289E-13	Chst11
ENSMUSG00000020728	101.5049098	2.625307159	0.340767561	7.704099382	1.31769E-14	7.2127E-13	Cep112
ENSMUSG00000052504	104.5645288	3.518506881	0.457061274	7.698107633	1.38096E-14	7.54163E-13	Epha3
ENSMUSG00000026121	712.4580391	1.775906633	0.230723933	7.69710629	1.39182E-14	7.58351E-13	Sema4c
ENSMUSG00000054136	96.78497864	4.070420249	0.529056239	7.693738297	1.42897E-14	7.76811E-13	Adm2
ENSMUSG00000031737	80.98935323	5.057984246	0.658982087	7.675450281	1.64839E-14	8.92006E-13	Irx5
ENSMUSG00000000094	140.514194	4.355499547	0.567971596	7.668516483	1.73997E-14	9.39426E-13	Tbx4
ENSMUSG00000045062	81.30223337	3.853100832	0.503284797	7.655905478	1.91955E-14	1.02936E-12	Pcdhb7
ENSMUSG00000062591	771.1872718	3.054364354	0.399497014	7.645524861	2.08095E-14	1.10841E-12	Tubb4a
ENSMUSG00000041046	933.8274219	3.990228771	0.521968337	7.644580124	2.09628E-14	1.11408E-12	Ramp3
ENSMUSG00000059900	55.42613518	3.826406849	0.501467269	7.630421928	2.33987E-14	1.24076E-12	Tmem40
ENSMUSG00000000938	83.10318586	5.160905684	0.676941591	7.623856703	2.46207E-14	1.30265E-12	Hoxa10
ENSMUSG00000028218	454.1714798	1.696270027	0.222540444	7.622300003	2.49195E-14	1.31553E-12	Fam92a
ENSMUSG00000027985	215.8074434	3.789451708	0.497521989	7.616651708	2.60341E-14	1.3653E-12	Lef1
ENSMUSG00000052316	67.59736238	6.302897048	0.827515863	7.616648009	2.60348E-14	1.3653E-12	Lrrc15
ENSMUSG00000063704	68.12830142	2.762396735	0.363455849	7.600363952	2.95299E-14	1.54518E-12	Mapk15
ENSMUSG00000031161	480.662613	1.214075276	0.159864099	7.594421017	3.09172E-14	1.60503E-12	Hdac6
ENSMUSG00000033032	874.6663038	2.484914788	0.327373129	7.590466562	3.18756E-14	1.64975E-12	Afap111
ENSMUSG00000024987	37.73027147	3.053311363	0.402849029	7.579294324	3.4744E-14	1.79041E-12	Cyp26a1
ENSMUSG00000051596	39.7030026	5.393228581	0.711736155	7.577567258	3.52095E-14	1.81047E-12	Otop1
ENSMUSG00000026411	952.4101389	2.291931269	0.302538255	7.575674255	3.57267E-14	1.8331E-12	Tmem9
ENSMUSG00000029093	1052.177138	2.624872369	0.346590941	7.573401556	3.63576E-14	1.86028E-12	Sorcs2
ENSMUSG00000039646	684.3956763	2.845222272	0.375951046	7.568065847	3.78822E-14	1.93118E-12	Vasn
ENSMUSG00000110887	80.56637611	3.218848666	0.425519959	7.564506902	3.89339E-14	1.98054E-12	NA
ENSMUSG00000043461	350.7930855	2.181133865	0.288552934	7.558869138	4.06589E-14	2.06387E-12	Sptssb

ENSMUSG00000027399	472.162265	4.08255618	0.540530887	7.552863817	4.2579E-14	2.14757E-12	Il1a
ENSMUSG00000062175	236.5749311	2.335507661	0.309617142	7.543211751	4.58536E-14	2.30295E-12	Tgif2
ENSMUSG00000003418	954.2871759	4.216919908	0.559274882	7.539977284	4.70053E-14	2.35582E-12	St8sia6
ENSMUSG00000048232	321.3972922	2.580050493	0.342329069	7.536755503	4.81808E-14	2.40965E-12	Fbxo10
ENSMUSG00000051790	1252.43243	2.191494853	0.291324362	7.522525206	5.37283E-14	2.67023E-12	Nlgn2
ENSMUSG00000005873	1688.012059	1.634334619	0.217269788	7.522143927	5.38852E-14	2.67244E-12	Reep5
ENSMUSG000000031958	338.7823887	2.279466546	0.304274721	7.491475259	6.81037E-14	3.35658E-12	Ldhd
ENSMUSG000000029409	79.68366829	4.946436423	0.661326471	7.479568169	7.45672E-14	3.65996E-12	U90926
ENSMUSG000000061111	1353.419834	2.087106937	0.279213178	7.474958579	7.72282E-14	3.75949E-12	Fam195b
ENSMUSG000000034685	121.2509841	1.897608168	0.254110007	7.467664071	8.16309E-14	3.94954E-12	Fam171a2
ENSMUSG000000039084	413.5965323	4.676362995	0.627200023	7.455935621	8.92323E-14	4.2738E-12	Chad
ENSMUSG000000029101	928.2279716	2.667664022	0.358283978	7.445669324	9.64541E-14	4.61039E-12	Rgs12
ENSMUSG000000039195	760.4127049	1.743289603	0.234153087	7.445084847	9.68821E-14	4.62155E-12	1110008P14Rik
ENSMUSG000000061517	257.5627816	3.82832829	0.514431713	7.441859032	9.92781E-14	4.72636E-12	Sox21
ENSMUSG000000050989	946.2012484	2.387465849	0.321301251	7.430614863	1.08094E-13	5.10513E-12	Sepp1
ENSMUSG000000072437	235.370541	3.82932343	0.515745047	7.424838007	1.12918E-13	5.30135E-12	Nanos1
ENSMUSG000000074813	47.07034635	3.840336273	0.517464962	7.421442134	1.15852E-13	5.41767E-12	NA
ENSMUSG000000044313	51.30856223	3.416203851	0.460427495	7.419634774	1.17444E-13	5.48132E-12	Mab21l3
ENSMUSG000000068196	471.5274889	3.693109497	0.49865936	7.406076753	1.30091E-13	6.05967E-12	Col8a1
ENSMUSG000000050334	90.61783702	3.827446702	0.51708224	7.402007662	1.34141E-13	6.2361E-12	C130071C03Rik
ENSMUSG000000036053	862.7187771	2.135870312	0.288748994	7.39679218	1.39317E-13	6.46411E-12	Fmnl2
ENSMUSG000000045763	537.4894671	2.529581724	0.342513525	7.385348432	1.52055E-13	6.98687E-12	Basp1
ENSMUSG000000053070	75.54795225	2.002458486	0.271165309	7.384641113	1.52865E-13	7.01055E-12	9230110C19Rik
ENSMUSG000000023031	2434.553357	3.479485001	0.471511343	7.3794301	1.58969E-13	7.27641E-12	Cela1
ENSMUSG000000031278	1422.066742	2.018898495	0.273877824	7.371529636	1.68681E-13	7.69135E-12	Acsl4
ENSMUSG000000002825	606.9346525	1.759639108	0.238824387	7.367920533	1.7331E-13	7.88727E-12	Qtrt1
ENSMUSG000000032936	399.2376006	6.275385637	0.852063018	7.364931356	1.77238E-13	8.04136E-12	Camkv
ENSMUSG000000034161	58.66861071	3.787598386	0.514281856	7.36482989	1.77373E-13	8.04136E-12	Scx
ENSMUSG000000051934	1136.350462	2.030790678	0.275912311	7.360275708	1.83531E-13	8.28889E-12	Spats2
ENSMUSG000000097062	196.1407667	2.039903146	0.277647374	7.347100439	2.02553E-13	9.13063E-12	NA
ENSMUSG000000038496	162.2743518	3.401247102	0.463472116	7.338622934	2.15803E-13	9.70948E-12	Slc19a3
ENSMUSG0000000063760	693.587104	2.088682124	0.285101821	7.326091835	2.36961E-13	1.05813E-11	Rnf217
ENSMUSG000000002319	978.5810204	1.231678109	0.168370114	7.315301255	2.56805E-13	1.14459E-11	lpo4
ENSMUSG000000032232	1118.012706	2.028840314	0.278223515	7.292123789	3.05107E-13	1.35479E-11	Cgnl1
ENSMUSG000000034006	801.1951038	1.722728347	0.23644411	7.28598546	3.19327E-13	1.41529E-11	Pqlc1
ENSMUSG000000028965	333.0458567	3.379494282	0.464551948	7.274739235	3.4709E-13	1.53262E-11	Tnfrsf9
ENSMUSG000000041347	158.6189985	3.865973101	0.531582743	7.272570736	3.5271E-13	1.55454E-11	Bdkrb1
ENSMUSG000000074211	727.8733466	1.554786203	0.214036888	7.264103939	3.75519E-13	1.64895E-11	Sdhaf1
ENSMUSG000000060548	1347.321658	3.605146884	0.497141988	7.251744919	4.11436E-13	1.79671E-11	Tnfrsf19
ENSMUSG000000039693	184.9393329	2.305272241	0.318264095	7.243268326	4.37999E-13	1.90919E-11	Msantd3
ENSMUSG000000025289	1167.737306	2.237931557	0.309117083	7.239753737	4.495E-13	1.95574E-11	Prdx4
ENSMUSG000000018930	252.226588	4.854105027	0.670532347	7.239181003	4.51402E-13	1.96042E-11	Ccl4
ENSMUSG000000027405	1608.849041	1.567502229	0.21662273	7.236093039	4.61795E-13	2.0019E-11	Nop56
ENSMUSG000000000982	496.2246756	5.37311376	0.742585049	7.235688044	4.63175E-13	2.00422E-11	Ccl3
ENSMUSG000000044041	30.14674571	6.505483423	0.899665111	7.231005567	4.79431E-13	2.06703E-11	Krt13
ENSMUSG000000071855	130.2567571	2.103318157	0.291495504	7.215610975	5.36924E-13	2.29409E-11	Ccdc112
ENSMUSG000000031303	248.0489319	2.293307771	0.318035305	7.21085909	5.56E-13	2.36708E-11	Map3k15
ENSMUSG000000032554	1115.735732	3.59494969	0.499548642	7.196395674	6.18251E-13	2.60411E-11	Trf
ENSMUSG000000046101	298.6596267	3.804940805	0.529475914	7.186239651	6.66001E-13	2.78411E-11	Mcmec2
ENSMUSG000000051242	219.5522862	3.271492414	0.455639536	7.180001205	6.97108E-13	2.89985E-11	Pcdhb9
ENSMUSG000000028865	59.74157423	3.719201716	0.518599306	7.171628799	7.41107E-13	3.0672E-11	Cd164l2
ENSMUSG000000024682	406.2464775	7.083560417	0.989019852	7.162202461	7.93911E-13	3.26865E-11	Gif
ENSMUSG000000040010	1839.15912	2.599935178	0.363258057	7.157267749	8.23009E-13	3.38259E-11	Slc7a5
ENSMUSG000000059857	181.3789433	4.044086904	0.565286978	7.154042218	8.42591E-13	3.4571E-11	Ntng1
ENSMUSG000000024990	964.2135474	4.292580696	0.600187211	7.152069587	8.54792E-13	3.49508E-11	Rbp4
ENSMUSG000000074121	33.88945592	3.8285975	0.535472411	7.149943531	8.68136E-13	3.54355E-11	Ntf5
ENSMUSG000000016382	1414.693572	1.715841777	0.240205468	7.143225294	9.1166E-13	3.69658E-11	Pls3
ENSMUSG000000054814	725.7456725	1.488258696	0.208337021	7.143515298	9.09738E-13	3.69658E-11	Usp46
ENSMUSG000000022129	38.5424656	3.51225037	0.49195867	7.139319999	9.37938E-13	3.79585E-11	Dct
ENSMUSG000000025352	176.7590641	3.025134622	0.42390413	7.136365054	9.58313E-13	3.86514E-11	Gdf11
ENSMUSG000000060985	32.85162429	3.549323903	0.497631281	7.132437285	9.8607E-13	3.97035E-11	Tdrd5
ENSMUSG000000027966	244.5133492	4.450443551	0.624621596	7.125023497	1.04063E-12	4.17588E-11	Col11a1
ENSMUSG000000007097	8388.935351	4.547365856	0.638254892	7.124686258	1.04318E-12	4.17905E-11	Atp1a2
ENSMUSG000000047562	2644.703672	2.609307575	0.366447186	7.12055564	1.07493E-12	4.29176E-11	Mmp10
ENSMUSG000000020092	535.7970181	2.154648086	0.302714534	7.117755644	1.09699E-12	4.36516E-11	Pald1
ENSMUSG000000007594	117.227549	3.511385804	0.49348684	7.115459866	1.1154E-12	4.43102E-11	Hapln4
ENSMUSG000000031861	230.1752574	2.024818939	0.284635905	7.113715821	1.1296E-12	4.47991E-11	Lpar2

ENSMUSG00000040690	1934.84062	2.821389706	0.396935866	7.107923342	1.17802E-12	4.65641E-11	Col16a1
ENSMUSG00000050212	451.19214	1.83841402	0.259418532	7.086671909	1.37376E-12	5.37643E-11	Eva1b
ENSMUSG00000108218	561.1344404	2.191530025	0.309242786	7.086762009	1.37286E-12	5.37643E-11	NA
ENSMUSG00000041540	142.2756021	2.355552587	0.332547221	7.083362714	1.40698E-12	5.4974E-11	Sox5
ENSMUSG00000027398	1665.311485	4.212068054	0.595816248	7.069407835	1.55596E-12	6.05958E-11	Il1b
ENSMUSG00000064264	139.2769611	2.251997991	0.318844605	7.062995441	1.62951E-12	6.31495E-11	Zfp428
ENSMUSG00000053477	1777.345049	1.475490571	0.209117714	7.055789509	1.71623E-12	6.64021E-11	Tcf4
ENSMUSG00000106549	32.08662737	3.792840145	0.537603787	7.055084505	1.72496E-12	6.66311E-11	NA
ENSMUSG00000032452	94.00353288	2.957162453	0.419187152	7.054515955	1.73203E-12	6.66872E-11	Clstn2
ENSMUSG00000053414	754.624024	2.139667058	0.303301974	7.054576765	1.73127E-12	6.66872E-11	Hunk
ENSMUSG00000089901	479.0031498	2.095508353	0.297308219	7.048269168	1.81157E-12	6.9637E-11	NA
ENSMUSG00000027999	1039.199773	2.748271548	0.390521952	7.037431659	1.95816E-12	7.46676E-11	Pla2g12a
ENSMUSG00000027713	48.87211707	2.614694308	0.371738181	7.033698558	2.01129E-12	7.6571E-11	1810062G17Rik
ENSMUSG00000018821	992.8166242	1.822961124	0.259336391	7.029330195	2.07527E-12	7.88803E-11	Avpi1
ENSMUSG00000000317	99.27121801	2.090474185	0.29743794	7.028270122	2.0911E-12	7.93548E-11	Bcl6b
ENSMUSG00000027015	638.3006904	3.523878915	0.501732893	7.023416172	2.16508E-12	8.20314E-11	Cybrd1
ENSMUSG00000030049	41.74972276	6.122252341	0.872058426	7.020461198	2.21137E-12	8.36518E-11	Gkn2
ENSMUSG00000038552	102.9537235	2.315847078	0.330102106	7.015547718	2.2905E-12	8.62331E-11	Fndc4
ENSMUSG00000008090	2199.371786	2.577087369	0.367720679	7.00827425	2.41276E-12	9.06921E-11	Fgfr1
ENSMUSG00000079414	95.06642021	2.722072747	0.388481039	7.006964235	2.43544E-12	9.12562E-11	Gm11110
ENSMUSG00000022696	823.0096837	2.627820471	0.375741881	6.993685302	2.67758E-12	9.98564E-11	Sid1t
ENSMUSG00000090356	40.81452355	5.290232927	0.756803148	6.990236421	2.74423E-12	1.02182E-10	NA
ENSMUSG00000025075	2060.293515	4.186263708	0.598918784	6.989701811	2.75471E-12	1.02411E-10	Habp2
ENSMUSG00000022947	251.7553293	2.100861651	0.300628633	6.988228737	2.78378E-12	1.03331E-10	Cbr3
ENSMUSG00000000295	893.9611615	2.009020343	0.287778174	6.981142157	2.9279E-12	1.08341E-10	Hddc2
ENSMUSG00000042834	685.8816261	3.434354375	0.492181924	6.977814929	2.99806E-12	1.10765E-10	Nrep
ENSMUSG00000049556	52.91812211	3.09143176	0.443434253	6.971567347	3.13429E-12	1.1526E-10	Lingo1
ENSMUSG00000073988	109.4681762	3.121752744	0.448052453	6.967382325	3.22892E-12	1.18374E-10	Ttpa
ENSMUSG00000032327	1631.783937	4.422955296	0.634987616	6.965419778	3.27426E-12	1.19851E-10	Stra6
ENSMUSG00000049128	21.72791595	5.688874689	0.816948058	6.963569636	3.31757E-12	1.2125E-10	Ivl
ENSMUSG00000039410	333.5557407	2.328321589	0.33460086	6.958504493	3.43904E-12	1.25496E-10	Prdm16
ENSMUSG000000037706	4162.439444	1.334962063	0.192420727	6.937724872	3.98465E-12	1.44078E-10	Cd81
ENSMUSG00000028497	491.6935159	2.430772326	0.351058283	6.924127539	4.38671E-12	1.57418E-10	Hacd4
ENSMUSG00000033825	99.81490458	3.357792041	0.48540866	6.917453923	4.59833E-12	1.64021E-10	Tpsb2
ENSMUSG00000046658	272.9317078	1.764318551	0.255563116	6.903650955	5.06827E-12	1.79973E-10	Zfp316
ENSMUSG00000024349	1190.951569	2.448890045	0.354757324	6.903000671	5.09154E-12	1.80529E-10	Tmem173
ENSMUSG00000001249	710.8790372	3.719076428	0.538850331	6.901872775	5.13214E-12	1.81698E-10	Hpn
ENSMUSG00000018470	53.22677098	2.62677052	0.381130287	6.892053999	5.49925E-12	1.93828E-10	Kcnab3
ENSMUSG00000014158	743.8027122	3.665525346	0.531877533	6.891671709	5.51405E-12	1.93905E-10	Trpv4
ENSMUSG00000041293	29.36953315	3.213724734	0.466367042	6.890977376	5.54104E-12	1.94435E-10	Adgrf1
ENSMUSG00000087264	23.92253341	4.727963468	0.687711415	6.874923644	6.20231E-12	2.16999E-10	Gad1os
ENSMUSG00000003573	278.7775403	1.989148661	0.289757211	6.86488062	6.65469E-12	2.32142E-10	Homer3
ENSMUSG00000026984	22.19477871	6.166177674	0.89961725	6.854223478	7.17009E-12	2.48661E-10	Il1f6
ENSMUSG00000062044	123.0319944	2.64063908	0.385305561	6.853363528	7.21335E-12	2.49796E-10	Lmtk3
ENSMUSG00000022773	57.55467497	3.304447753	0.482422814	6.84969213	7.40091E-12	2.55918E-10	Ypel1
ENSMUSG00000050394	70.88253093	2.681764018	0.391922528	6.842587065	7.77756E-12	2.68552E-10	Armxc6
ENSMUSG00000008999	1451.935889	2.814519659	0.412332939	6.825842396	8.74109E-12	2.99644E-10	Bmp7
ENSMUSG00000039081	914.7243451	1.616352548	0.236999356	6.820071486	9.09952E-12	3.11033E-10	Zfp503
ENSMUSG00000053091	305.968971	1.35159211	0.19839576	6.812605809	9.58465E-12	3.25741E-10	Lins1
ENSMUSG00000018012	435.8774378	3.409015381	0.500560695	6.810393662	9.7332E-12	3.30317E-10	Rac3
ENSMUSG00000041961	771.2019035	2.508438822	0.368374124	6.809487036	9.79474E-12	3.31931E-10	Znrf3
ENSMUSG00000032332	2366.061869	3.169315617	0.465759011	6.804625449	1.01312E-11	3.42846E-10	Col12a1
ENSMUSG00000044968	531.5915803	2.392786976	0.35174512	6.802615987	1.02736E-11	3.4717E-10	Napepld
ENSMUSG00000005973	1070.477472	2.454266121	0.360860694	6.801145602	1.0379E-11	3.50234E-10	Rcn1
ENSMUSG00000028751	39.57187174	2.965133287	0.436178635	6.797979205	1.06097E-11	3.56497E-10	Pla2g2e
ENSMUSG00000040669	491.5620776	1.186464458	0.174574424	6.796324633	1.07322E-11	3.59615E-10	Phc1
ENSMUSG00000020766	1779.123043	1.534296794	0.225772625	6.795760979	1.07742E-11	3.60497E-10	Galk1
ENSMUSG00000053552	99.63373545	2.443576603	0.360319182	6.781700013	1.1877E-11	3.94615E-10	Ebf4
ENSMUSG00000000934	362.4016631	1.855787735	0.273994556	6.773082506	1.26067E-11	4.18275E-10	Top1mt
ENSMUSG00000033377	422.5596428	3.01754443	0.445954955	6.766478087	1.31955E-11	4.36591E-10	Palmd
ENSMUSG00000007207	438.40063	2.463058825	0.36420541	6.762828776	1.35323E-11	4.47112E-10	Stx1a
ENSMUSG00000070858	73.64634474	3.713447947	0.549115546	6.762598465	1.35539E-11	4.47202E-10	Gm1673
ENSMUSG00000029246	570.3278069	1.835929791	0.271758573	6.755738262	1.4211E-11	4.67584E-10	Ppat
ENSMUSG00000022636	1347.221353	1.75251412	0.259512272	6.753106924	1.44712E-11	4.75489E-10	Alcam
ENSMUSG00000020937	293.9101891	2.245380303	0.332512069	6.752778349	1.4504E-11	4.75909E-10	Plcd3
ENSMUSG00000028111	716.5839379	3.220795921	0.477045202	6.751552911	1.46271E-11	4.78625E-10	Ctsk
ENSMUSG00000032997	981.3466788	1.819800614	0.269619162	6.749522544	1.48332E-11	4.84037E-10	Chpf

ENSMUSG00000038224	637.7066697	4.380154697	0.649057195	6.748488007	1.49394E-11	4.86831E-10	Serpinf2
ENSMUSG00000024186	315.6779544	2.934428204	0.435234467	6.7421779	1.5603E-11	5.0776E-10	Rgs11
ENSMUSG00000057193	2260.903202	2.253052445	0.334287182	6.739870886	1.58527E-11	5.15182E-10	Slc44a2
ENSMUSG00000027907	6576.753204	1.568726116	0.23279097	6.738775628	1.59727E-11	5.1837E-10	S100a11
ENSMUSG00000027953	1033.397844	1.060212218	0.157375189	6.736844783	1.61863E-11	5.24586E-10	Slc50a1
ENSMUSG00000032323	75.28169972	3.434855718	0.509972271	6.735377419	1.63505E-11	5.29186E-10	Cyp11a1
ENSMUSG00000020000	214.4980451	2.615295056	0.388741845	6.727588224	1.72498E-11	5.57533E-10	Moxd1
ENSMUSG00000026796	3254.962738	1.909470492	0.283995081	6.723604104	1.77284E-11	5.72222E-10	Fam129b
ENSMUSG00000028431	627.6990336	1.243381628	0.184958869	6.722476369	1.78662E-11	5.75887E-10	Ikbkap
ENSMUSG00000029478	2043.462403	0.905880583	0.134769608	6.721697851	1.79619E-11	5.78189E-10	Ncor2
ENSMUSG00000001761	858.0050055	1.665301041	0.247788417	6.720657319	1.80907E-11	5.81545E-10	Smo
ENSMUSG00000032854	29.69447902	3.269056157	0.486682239	6.717023743	1.85474E-11	5.95421E-10	Ugt8a
ENSMUSG00000039232	294.1563749	2.74506636	0.40912191	6.709653754	1.95087E-11	6.24483E-10	Stx11
ENSMUSG00000013766	36.71021716	3.118947046	0.465639476	6.698201513	2.11E-11	6.7102E-10	Ly6g6e
ENSMUSG00000040828	100.8308591	3.418721414	0.510437724	6.697626866	2.11831E-11	6.72763E-10	Catsperd
ENSMUSG00000016758	119.4068695	2.379738785	0.355347115	6.696941339	2.12827E-11	6.75022E-10	Bik
ENSMUSG00000086373	38.60043994	5.66584949	0.847019642	6.689159502	2.24456E-11	7.08124E-10	Gm11978
ENSMUSG00000033256	596.23735	2.152225978	0.321840934	6.687235054	2.27426E-11	7.15595E-10	Shf
ENSMUSG00000078952	78.3815506	4.497805622	0.673247937	6.680756633	2.37712E-11	7.46968E-10	Lncenc1
ENSMUSG00000054256	366.8585458	2.601611409	0.389588632	6.677842202	2.42486E-11	7.60964E-10	Msi1
ENSMUSG00000034177	3576.468482	2.492819563	0.373364111	6.676644827	2.44474E-11	7.66192E-10	Rnf43
ENSMUSG000000089728	74.05829243	5.895594474	0.883605698	6.672200606	2.51996E-11	7.87686E-10	NA
ENSMUSG00000085329	60.98184331	4.512836607	0.677350674	6.6624819	2.69241E-11	8.36092E-10	NA
ENSMUSG00000024535	450.7965411	1.732048869	0.260025988	6.661060613	2.71858E-11	8.42017E-10	Snx24
ENSMUSG00000004846	1610.16944	1.511882095	0.227014558	6.65984643	2.74114E-11	8.47897E-10	Plod3
ENSMUSG00000030223	831.1464893	3.715786146	0.558222984	6.656454953	2.80511E-11	8.65431E-10	Ptpro
ENSMUSG00000040446	527.5425688	1.886963279	0.28349117	6.656162447	2.8107E-11	8.6603E-10	Rprd1a
ENSMUSG00000027978	333.1164304	3.935398719	0.591658793	6.651466635	2.90187E-11	8.90656E-10	Prss12
ENSMUSG00000105565	19.47035276	3.597708362	0.540876433	6.651627139	2.8987E-11	8.90656E-10	NA
ENSMUSG00000087366	68.3748428	2.459394938	0.370163772	6.644072496	3.05132E-11	9.34114E-10	NA
ENSMUSG00000044258	8898.033727	4.623141715	0.696871862	6.634134575	3.26412E-11	9.94134E-10	Ctla2a
ENSMUSG000000035246	83.81641046	2.605819678	0.393285407	6.62577262	3.45437E-11	1.04537E-09	Pcyt1b
ENSMUSG00000006269	21.06394024	4.853456575	0.733014484	6.621228751	3.56225E-11	1.07528E-09	Atp6v1b1
ENSMUSG00000013076	1300.377608	2.094402739	0.316403949	6.619395076	3.60672E-11	1.08732E-09	Amotl1
ENSMUSG00000021340	945.9379233	3.23744433	0.489254189	6.61710089	3.66312E-11	1.10293E-09	Gpld1
ENSMUSG00000015653	508.0665595	1.842101951	0.278629385	6.611298192	3.80964E-11	1.14414E-09	Steap2
ENSMUSG00000007805	36.92900893	3.396290637	0.514172575	6.605351595	3.96575E-11	1.18653E-09	Twist2
ENSMUSG00000006777	4911.327004	2.814538046	0.426389617	6.600859721	4.0878E-11	1.22151E-09	Krt23
ENSMUSG00000026065	123.9621543	2.948304343	0.446857793	6.597858175	4.1714E-11	1.24492E-09	Slc9a4
ENSMUSG00000022883	447.036427	3.036962775	0.460541589	6.594329042	4.27183E-11	1.27181E-09	Robo1
ENSMUSG00000022218	141.3760665	2.505948659	0.381078108	6.575944951	4.83451E-11	1.43382E-09	Tgm1
ENSMUSG00000044005	68.32743558	2.705916037	0.411478261	6.576085047	4.82996E-11	1.43382E-09	Gls2
ENSMUSG00000038242	33.71597424	4.12942607	0.628219326	6.573223552	4.92374E-11	1.45846E-09	Aox4
ENSMUSG00000027239	469.3893538	3.316870559	0.504893128	6.569450795	5.05012E-11	1.49217E-09	Mdk
ENSMUSG00000038578	253.8980721	1.974729198	0.301448303	6.550805496	5.72276E-11	1.68463E-09	Susd1
ENSMUSG00000027656	99.16537693	3.384591188	0.516958795	6.547119852	5.86573E-11	1.72458E-09	Wisp2
ENSMUSG00000039178	165.2886027	1.637249072	0.250089834	6.546643832	5.88445E-11	1.72795E-09	Tbcl1d19
ENSMUSG00000076437	614.3686611	1.822002109	0.278777759	6.535679581	6.33214E-11	1.85254E-09	2700094K13Rik
ENSMUSG00000023911	212.7029067	1.800914007	0.275678801	6.532653217	6.46146E-11	1.88573E-09	Flywch2
ENSMUSG00000054555	217.33603	3.451443637	0.528365346	6.532305091	6.47651E-11	1.8878E-09	Adam12
ENSMUSG00000025425	29.50785101	6.189620248	0.948886488	6.523035499	6.88985E-11	2.00583E-09	St8sia5
ENSMUSG00000029819	2009.639182	5.219087454	0.801458612	6.511986237	7.41635E-11	2.15119E-09	Npy
ENSMUSG00000046618	311.3120542	2.729259574	0.41948018	6.506289697	7.70296E-11	2.22889E-09	Olfml2a
ENSMUSG00000038525	1407.251337	1.355023665	0.208537127	6.497757432	8.15261E-11	2.34756E-09	Armc10
ENSMUSG00000079045	28.85058088	5.715686292	0.879914268	6.495730892	8.26312E-11	2.3765E-09	LOC102632463
ENSMUSG00000028527	505.450416	2.489940337	0.383565843	6.491559094	8.49526E-11	2.43149E-09	Ak4
ENSMUSG00000027186	53.33547042	4.031670448	0.621636376	6.485576785	8.8393E-11	2.52084E-09	Elf5
ENSMUSG00000040434	453.1594377	1.866529835	0.288020165	6.48055263	9.13873E-11	2.6E-09	Large2
ENSMUSG00000029484	1389.133028	2.213376488	0.341634652	6.478782156	9.24659E-11	2.6244E-09	Anxa3
ENSMUSG00000063458	108.7009789	2.161115997	0.333563926	6.478866057	9.24145E-11	2.6244E-09	1700112E06Rik
ENSMUSG00000019737	475.5271029	2.790709842	0.431206058	6.471870669	9.6797E-11	2.74404E-09	Syne4
ENSMUSG00000038368	403.628599	1.351135726	0.208914898	6.467397666	9.9705E-11	2.81975E-09	Focad
ENSMUSG00000049532	194.8710661	1.701073432	0.263422252	6.457592026	1.06382E-10	2.99788E-09	Sall2
ENSMUSG00000024357	1027.594045	1.600967775	0.247968644	6.456331536	1.07271E-10	3.01936E-09	Sil1
ENSMUSG00000015652	238.6001383	2.967515637	0.459645398	6.456097788	1.07437E-10	3.02045E-09	Steap1
ENSMUSG00000001865	33.63059161	3.599774327	0.557636811	6.455410144	1.07926E-10	3.03061E-09	Cpa3
ENSMUSG00000047407	1844.499592	1.840061876	0.285231344	6.451120862	1.11026E-10	3.10663E-09	Tgif1



ENSMUSG00000034684	1455.264713	2.369252976	0.36766581	6.444039434	1.16335E-10	3.24753E-09	Sema3f
ENSMUSG00000029123	16.20260668	4.59667105	0.713483555	6.442574632	1.17464E-10	3.27519E-09	Stk32b
ENSMUSG00000001943	595.3467218	4.396508062	0.682682375	6.440049173	1.19435E-10	3.32236E-09	Vsig2
ENSMUSG00000028318	305.9602937	1.4269681	0.221833602	6.432605728	1.25435E-10	3.46577E-09	Polr1e
ENSMUSG00000048696	243.4237178	1.722742351	0.267815634	6.432568283	1.25466E-10	3.46577E-09	Mex3d
ENSMUSG000000064147	70.58620651	3.241107955	0.503880637	6.432293125	1.25693E-10	3.46802E-09	Rab44
ENSMUSG00000025538	276.5301083	1.758943287	0.273737931	6.425646906	1.3131E-10	3.61041E-09	Sumf2
ENSMUSG00000033227	661.832119	3.458968287	0.538294254	6.425794559	1.31182E-10	3.61041E-09	Wnt6
ENSMUSG00000016995	52.23159206	1.974414223	0.307442259	6.422065162	1.34438E-10	3.68788E-09	Matn4
ENSMUSG00000031785	2576.337923	1.837491091	0.286228591	6.419662988	1.36576E-10	3.74222E-09	Adgrg1
ENSMUSG00000022225	62.64170353	3.599946879	0.561731888	6.408656792	1.46807E-10	3.99949E-09	Cma1
ENSMUSG000000085412	23.39854208	4.698611402	0.733719344	6.403826532	1.5153E-10	4.11871E-09	Halr1
ENSMUSG000000051727	343.142359	2.491651754	0.38925674	6.401049734	1.54312E-10	4.18953E-09	Kctd14
ENSMUSG00000028963	18.53468788	5.880110406	0.918999179	6.398384833	1.57029E-10	4.25357E-09	Uts2
ENSMUSG00000025469	24.6488374	6.045209486	0.945392159	6.39439351	1.61186E-10	4.35624E-09	Msx3
ENSMUSG00000043439	301.9777418	2.324975508	0.364176939	6.384192022	1.72305E-10	4.65145E-09	E130012A19Rik
ENSMUSG00000023868	235.207731	2.60946627	0.409127269	6.378128438	1.79265E-10	4.8229E-09	Pde10a
ENSMUSG00000020284	341.6731262	1.81813147	0.285252435	6.373763195	1.84445E-10	4.95665E-09	1810043G02Rik
ENSMUSG00000013155	156.8090173	1.759308771	0.276136222	6.371162612	1.87601E-10	5.03007E-09	Enkd1
ENSMUSG00000037784	253.4017778	1.982112237	0.311098786	6.371327453	1.87399E-10	5.03007E-09	Dzip1l
ENSMUSG00000051343	938.1071073	2.178321828	0.342411905	6.361700027	1.99533E-10	5.33195E-09	Rab11fip5
ENSMUSG000000086515	24.4449261	4.288502384	0.674216156	6.360723259	2.00806E-10	5.35994E-09	NA
ENSMUSG000000090534	30.35438986	2.961371109	0.466284937	6.350990294	2.13933E-10	5.67843E-09	LOC105245869
ENSMUSG00000025608	1689.689585	1.640491899	0.258763704	6.339729548	2.30169E-10	6.08219E-09	Podxl
ENSMUSG000000108105	38.18682473	3.619198206	0.570947741	6.338930774	2.31365E-10	6.10023E-09	NA
ENSMUSG00000000489	405.6044513	1.85621175	0.292907944	6.337184726	2.34001E-10	6.1629E-09	Pdgfb
ENSMUSG00000039903	183.2138751	2.204563769	0.348081573	6.333468762	2.3971E-10	6.29928E-09	Eva1c
ENSMUSG00000052512	790.4121824	1.540070876	0.243322811	6.329332093	2.46225E-10	6.46333E-09	Nav2
ENSMUSG00000028031	381.1174881	2.576167462	0.40704575	6.328938364	2.46854E-10	6.47269E-09	Dkk2
ENSMUSG00000025582	282.3686846	4.46206676	0.705507745	6.324617684	2.5386E-10	6.61987E-09	Nptx1
ENSMUSG00000004032	1697.263226	2.621150088	0.414601033	6.322102163	2.58029E-10	6.72119E-09	Gstm5
ENSMUSG000000026822	19274.55843	4.158024215	0.658076234	6.318453698	2.64193E-10	6.87424E-09	Lcn2
ENSMUSG00000022996	61.45030762	4.646370632	0.735798568	6.314731825	2.7063E-10	7.02633E-09	Wnt10b
ENSMUSG00000042379	163.5922722	2.359493399	0.374281672	6.304058088	2.89952E-10	7.49521E-09	Esm1
ENSMUSG00000055373	23.01991489	4.862604735	0.771525951	6.302580919	2.9273E-10	7.55879E-09	Fut9
ENSMUSG00000048058	287.7026133	1.458734811	0.231513194	6.300871189	2.95977E-10	7.63435E-09	Ldlrad3
ENSMUSG00000030659	675.1884575	2.098541457	0.333114127	6.299767216	2.98093E-10	7.68058E-09	Nucb2
ENSMUSG00000042607	692.9545143	4.80424797	0.763414021	6.293109425	3.11169E-10	7.98286E-09	Asb4
ENSMUSG00000018211	126.2577371	4.82185833	0.766882875	6.287607255	3.22396E-10	8.25307E-09	Wfdc15b
ENSMUSG00000030772	3548.988747	2.205467355	0.350812971	6.286732642	3.24217E-10	8.29074E-09	Dkk3
ENSMUSG00000024271	1553.12632	1.026807838	0.163344444	6.286150978	3.25433E-10	8.3129E-09	Elp2
ENSMUSG000000062480	122.57209244	2.931932961	0.466562448	6.284116899	3.29723E-10	8.41341E-09	Acat3
ENSMUSG00000028357	825.5018968	3.462585556	0.552559293	6.266450681	3.6937E-10	9.31503E-09	Kif12
ENSMUSG00000023088	1388.740654	1.845040028	0.294550608	6.263915185	3.7543E-10	9.45314E-09	Abcc1
ENSMUSG00000037679	1054.455028	2.107505886	0.336471878	6.263542435	3.76329E-10	9.45314E-09	Inf2
ENSMUSG000000091709	34.18639981	4.868201772	0.77723317	6.263502329	3.76426E-10	9.45314E-09	NA
ENSMUSG00000027603	211.1398979	1.783865029	0.284881899	6.261770356	3.80631E-10	9.53769E-09	Ggt7
ENSMUSG00000048644	384.3017487	2.237912108	0.357401719	6.261615393	3.8101E-10	9.53769E-09	Ctxn1
ENSMUSG00000020570	10291.43036	1.805529161	0.288387068	6.260784072	3.83047E-10	9.56851E-09	Sypl
ENSMUSG00000046668	652.7340397	2.351764176	0.375909773	6.256193224	3.94488E-10	9.83364E-09	Cxxc5
ENSMUSG00000072591	109.0967773	4.447403359	0.71094866	6.255590041	3.96016E-10	9.86137E-09	5930412G12Rik
ENSMUSG00000000567	1957.349855	2.800164753	0.448104478	6.248910448	4.13326E-10	1.02709E-08	Sox9
ENSMUSG00000046387	90.88013828	1.807219746	0.289417209	6.244341005	4.25591E-10	1.05426E-08	Pcdhb17
ENSMUSG00000015133	1313.654676	1.122742296	0.17989117	6.241230719	4.34141E-10	1.07097E-08	Lrrk1
ENSMUSG00000026857	813.4479228	1.443912366	0.231345853	6.241358327	4.33787E-10	1.07097E-08	Ntmt1
ENSMUSG00000026241	29.28663847	4.523508969	0.7248373	6.240723224	4.35552E-10	1.07334E-08	Nppc
ENSMUSG00000046572	164.458758	1.548271246	0.24821559	6.237606764	4.44316E-10	1.09154E-08	Zfp518b
ENSMUSG00000070645	586.7880252	6.144490671	0.985269723	6.236353893	4.47887E-10	1.09917E-08	NA
ENSMUSG00000061013	68.11898581	2.394212947	0.384070939	6.233777948	4.55318E-10	1.11511E-08	Mkx
ENSMUSG00000041736	2229.796085	1.484331496	0.238217668	6.230988287	4.63502E-10	1.13398E-08	Tspo
ENSMUSG00000063727	788.9695854	2.884572384	0.463088769	6.228983676	4.69471E-10	1.14622E-08	Tnfrsf11b
ENSMUSG000000004791	151.0566673	2.677653313	0.430557523	6.219037343	5.00214E-10	1.21753E-08	Pgf
ENSMUSG00000035818	260.5193459	3.259524485	0.52452896	6.214193554	5.15889E-10	1.25183E-08	Plekhs1
ENSMUSG00000039715	271.2000431	1.061573817	0.170860297	6.213109981	5.19461E-10	1.25793E-08	Wdr34
ENSMUSG00000013236	1825.519104	2.179559122	0.350809654	6.212939399	5.20025E-10	1.25802E-08	Ptprs
ENSMUSG00000005503	31.67196801	5.412398802	0.871926998	6.207399032	5.38687E-10	1.29919E-08	Evx1
ENSMUSG00000045777	53.55615463	2.642893007	0.42607036	6.202949695	5.54146E-10	1.33242E-08	Ifitm10



ENSMUSG00000036356	188.7121812	3.350857941	0.540393537	6.200773533	5.61863E-10	1.34961E-08	Csgalnact1
ENSMUSG00000107696	15.73156517	5.697687356	0.919223999	6.198366623	5.70521E-10	1.36902E-08	NA
ENSMUSG00000033488	276.1477212	1.685428525	0.272700364	6.180514392	6.38931E-10	1.52701E-08	BC026585
ENSMUSG00000035357	1231.886192	1.47232761	0.238243815	6.179919559	6.41343E-10	1.53055E-08	Pdznr3
ENSMUSG00000020646	478.7055449	2.814637508	0.455497785	6.179256193	6.44043E-10	1.53459E-08	Mboat2
ENSMUSG00000032359	3487.530834	1.126895593	0.182418672	6.177523295	6.5115E-10	1.54866E-08	Ctsh
ENSMUSG00000052105	348.7758929	1.26875041	0.205382556	6.177498387	6.51252E-10	1.54866E-08	Mtcl1
ENSMUSG00000020953	333.0344955	4.278356413	0.692877144	6.174769149	6.62602E-10	1.57223E-08	Coch
ENSMUSG00000071856	388.3128192	2.126303772	0.344360813	6.174639193	6.63147E-10	1.57223E-08	Mcc
ENSMUSG00000029154	81.36518316	3.424845498	0.554790521	6.173222804	6.69118E-10	1.5848E-08	Cwh43
ENSMUSG00000089948	43.89161994	3.210369156	0.520208292	6.171314846	6.77244E-10	1.60245E-08	NA
ENSMUSG00000024177	182.3083347	2.119019453	0.343468063	6.169480313	6.85148E-10	1.61793E-08	Nme4
ENSMUSG00000101581	22.78414753	4.140076427	0.671618729	6.164325452	7.07842E-10	1.66655E-08	C430002N11Rik
ENSMUSG00000034910	119.6332868	1.633919156	0.265103437	6.163326955	7.12322E-10	1.67364E-08	Pygo1
ENSMUSG00000070524	30.6767912	4.031254533	0.654060922	6.163423619	7.11887E-10	1.67364E-08	Fcrlb
ENSMUSG00000000901	172.9691983	1.987666838	0.322829742	6.157012744	7.41299E-10	1.72989E-08	Mmp11
ENSMUSG00000036111	100.1933894	3.552173358	0.577667649	6.149164429	7.78922E-10	1.80977E-08	Lmo1
ENSMUSG00000001630	939.7620644	1.509407114	0.245738453	6.142331805	8.13188E-10	1.88285E-08	Stk38l
ENSMUSG00000042250	50.87679232	5.885292537	0.95886729	6.137755036	8.36958E-10	1.9326E-08	Pglyrp4
ENSMUSG00000019732	42.31395048	2.343856437	0.382032918	6.135221138	8.50408E-10	1.95043E-08	Calr3
ENSMUSG00000020916	29.66078556	3.827942006	0.623922516	6.135284284	8.5007E-10	1.95043E-08	Krt36
ENSMUSG00000023009	274.2257588	2.04114416	0.332686143	6.135344683	8.49748E-10	1.95043E-08	Nckap5l
ENSMUSG00000055555	15.08327403	4.440285795	0.723740722	6.135188559	8.50582E-10	1.95043E-08	4930502E18Rik
ENSMUSG00000026558	2690.897237	1.640384245	0.26766241	6.128556662	8.86798E-10	2.03151E-08	Uck2
ENSMUSG00000029343	118.4954385	4.61397737	0.752943241	6.127921896	8.90343E-10	2.03767E-08	Crybb1
ENSMUSG00000006442	986.3597531	1.825477532	0.298024314	6.125263777	9.05335E-10	2.06799E-08	Srm
ENSMUSG00000032643	244.3693596	2.853625442	0.466194733	6.121101843	9.29305E-10	2.12071E-08	Fhl3
ENSMUSG00000032263	328.6760025	1.095051004	0.178912066	6.120610138	9.32177E-10	2.12522E-08	Bckdhb
ENSMUSG00000094305	489.5335747	4.844780838	0.792146956	6.116012695	9.59457E-10	2.18322E-08	Scgb2b20
ENSMUSG00000102460	24.04452719	3.524024374	0.576656582	6.111131798	9.8927E-10	2.24247E-08	NA
ENSMUSG00000022580	43.50752333	3.555550894	0.582606989	6.102829108	1.04207E-09	2.34872E-08	Rhpn1
ENSMUSG000000038600	199.251063	3.484650762	0.571356671	6.098906232	1.06797E-09	2.40252E-08	Atp6v0a4
ENSMUSG00000038264	3214.519608	2.505346988	0.41084857	6.097981525	1.07416E-09	2.41417E-08	Sema7a
ENSMUSG00000036446	2090.644075	2.850374547	0.467978497	6.09082375	1.12331E-09	2.51749E-08	Lum
ENSMUSG00000029769	277.9757709	2.187392808	0.35923739	6.088989819	1.13625E-09	2.54196E-08	Ccdc136
ENSMUSG00000001576	3610.718987	1.628065369	0.267434749	6.087710645	1.14537E-09	2.55514E-08	Ergic1
ENSMUSG00000037578	37.81871428	4.398749693	0.722565573	6.087682358	1.14557E-09	2.55514E-08	Pkd2l1
ENSMUSG00000038301	1041.519867	1.518156245	0.249384519	6.087612218	1.14607E-09	2.55514E-08	Snx10
ENSMUSG00000049036	54.57884887	3.509098626	0.576453412	6.087393279	1.14764E-09	2.55514E-08	Tmem121
ENSMUSG00000059325	1536.176462	1.442828015	0.237015641	6.087480179	1.14702E-09	2.55514E-08	Hopx
ENSMUSG00000018906	673.2285361	2.236503409	0.367972758	6.077904839	1.21763E-09	2.68829E-08	P4ha2
ENSMUSG000000001506	19604.99884	3.982518047	0.655393303	6.076531493	1.2281E-09	2.70889E-08	Col1a1
ENSMUSG00000020212	146.6995618	1.58089945	0.260176198	6.076264715	1.23014E-09	2.71088E-08	Mdm1
ENSMUSG00000008575	1670.365731	1.12792687	0.185695858	6.07405507	1.2472E-09	2.74592E-08	Nfib
ENSMUSG00000044912	91.60826109	3.453060792	0.56863908	6.072499967	1.25934E-09	2.77008E-08	Syt16
ENSMUSG00000036580	748.8491057	1.611985619	0.26558874	6.069480282	1.28325E-09	2.81745E-08	Spg20
ENSMUSG00000024529	1837.514141	3.68392221	0.60780914	6.060985218	1.3529E-09	2.95921E-08	Lox
ENSMUSG00000038022	83.00436632	1.63887163	0.270402944	6.060849795	1.35404E-09	2.95921E-08	Fam188b
ENSMUSG00000108722	17.15661267	5.245580088	0.865549731	6.060402887	1.35781E-09	2.96356E-08	NA
ENSMUSG00000066643	229.4157273	1.55694617	0.256981611	6.058589809	1.3732E-09	2.99008E-08	Wdr35
ENSMUSG00000024304	335.8793299	2.083106914	0.344089291	6.053971935	1.41317E-09	3.06868E-08	Cdh2
ENSMUSG00000029386	278.380593	1.508558357	0.249190947	6.053824879	1.41446E-09	3.06868E-08	NA
ENSMUSG00000062310	18.43011396	4.149782577	0.685810834	6.050914293	1.44026E-09	3.11895E-08	Glrp1
ENSMUSG00000024365	24.14408578	4.229496181	0.699082258	6.050069402	1.44783E-09	3.13249E-08	Cyp21a1
ENSMUSG00000066721	25.53860252	2.353435065	0.38901453	6.049735637	1.45084E-09	3.13613E-08	Zfp575
ENSMUSG00000020583	10.42066204	5.37288521	0.888327613	6.048314984	1.46369E-09	3.15816E-08	Matn3
ENSMUSG00000044034	57.34816006	3.821679521	0.632425842	6.042889568	1.51378E-09	3.25443E-08	Npb
ENSMUSG00000019235	87.56612146	2.671356695	0.442401373	6.038310138	1.55737E-09	3.33906E-08	Rps6kl1
ENSMUSG00000026258	52.24848713	5.386650096	0.892437185	6.035887104	1.58092E-09	3.3804E-08	3110079015Rik
ENSMUSG00000007891	11448.23804	1.668157859	0.27648532	6.033440976	1.60505E-09	3.42275E-08	Ctsd
ENSMUSG00000037129	50.31791557	4.606502672	0.763514825	6.033285171	1.6066E-09	3.42298E-08	Tmprss13
ENSMUSG00000022297	600.5039974	2.292156863	0.379972419	6.032429593	1.61513E-09	3.43808E-08	Fzd6
ENSMUSG00000039328	225.2779397	1.558680332	0.258536568	6.028858281	1.65122E-09	3.51176E-08	Rnf122
ENSMUSG00000022652	31.16570898	3.776611384	0.626565996	6.027475805	1.6654E-09	3.53876E-08	Morc1
ENSMUSG00000068099	66.73520633	3.75954212	0.624432559	6.020733646	1.73628E-09	3.66877E-08	1500009C09Rik
ENSMUSG00000032436	660.3802407	2.168389811	0.360193162	6.020074898	1.74336E-09	3.6781E-08	Cmtm7
ENSMUSG00000109324	2943.2927	1.484610395	0.246627413	6.019648736	1.74796E-09	3.68452E-08	Prmt1

ENSMUSG00000081207	16.78250219	5.663733101	0.941962437	6.01269528	1.82464E-09	3.84274E-08	NA
ENSMUSG00000091475	101.8770494	2.646340751	0.440170381	6.012082747	1.83155E-09	3.85388E-08	2810468N07Rik
ENSMUSG00000025403	1817.068034	1.629323463	0.271534968	6.000418574	1.9681E-09	4.11656E-08	Shmt2
ENSMUSG00000040152	8315.288222	2.486204656	0.414504827	5.998011344	1.99749E-09	4.16248E-08	Thbs1
ENSMUSG00000034768	101.6109109	3.089096013	0.515145314	5.996552678	2.0155E-09	4.19634E-08	Asb16
ENSMUSG00000050248	290.5340698	1.925406588	0.321592182	5.987106326	2.13607E-09	4.41257E-08	Evcl2
ENSMUSG00000033773	374.2703606	1.211083309	0.202296213	5.986683033	2.14164E-09	4.42022E-08	Rpap2
ENSMUSG00000028766	208.1629388	2.662486564	0.444864017	5.984944749	2.16463E-09	4.45993E-08	Alpl
ENSMUSG00000044461	575.0497296	1.741184913	0.290925765	5.9849801	2.16416E-09	4.45993E-08	Shisa2
ENSMUSG00000014813	657.9693518	3.278970643	0.548237197	5.98093428	2.21861E-09	4.55929E-08	Stc1
ENSMUSG00000006931	343.1510239	1.61355547	0.269796132	5.980647157	2.22253E-09	4.56339E-08	P3h4
ENSMUSG00000005958	1625.065933	3.168706608	0.530294236	5.975374409	2.29562E-09	4.70533E-08	Ephb3
ENSMUSG00000086266	50.67068718	3.243344431	0.543501559	5.967497934	2.40919E-09	4.91269E-08	Igf2os
ENSMUSG00000038059	1442.295826	2.299852834	0.385456687	5.966566184	2.42298E-09	4.93657E-08	Smim3
ENSMUSG00000022763	146.871156	2.185905254	0.366567852	5.963166823	2.47396E-09	5.02319E-08	Aifm3
ENSMUSG00000037499	609.9952731	1.243244806	0.208738834	5.955982324	2.58514E-09	5.22661E-08	Nenf
ENSMUSG00000031736	50.0194689	3.548633704	0.596000923	5.954074177	2.61548E-09	5.27896E-08	Cnrde
ENSMUSG00000002847	405.7780334	2.663335911	0.447617568	5.950025427	2.68101E-09	5.40563E-08	Pla1a
ENSMUSG00000071547	242.3081135	2.720919016	0.457303729	5.949916526	2.68279E-09	5.40563E-08	Nt5dc2
ENSMUSG00000030218	3256.855314	2.549113751	0.428509588	5.948790462	2.70131E-09	5.43373E-08	Mgp
ENSMUSG00000025202	34.75984732	3.110766515	0.523072332	5.947105825	2.72925E-09	5.48528E-08	Scd3
ENSMUSG00000007465	11.45738768	5.397249379	0.907717344	5.945958192	2.74844E-09	5.51919E-08	Bpifb4
ENSMUSG00000028641	395.5229358	2.004704282	0.337467067	5.940444206	2.84251E-09	5.68885E-08	P3h1
ENSMUSG00000001763	241.0590029	2.489603085	0.419165017	5.93943432	2.86007E-09	5.71918E-08	Tspan33
ENSMUSG00000003355	740.1612083	3.383894724	0.569844513	5.938277275	2.88033E-09	5.75E-08	Fkbp11
ENSMUSG00000043621	257.6233294	2.427015057	0.408751135	5.937635026	2.89163E-09	5.76772E-08	Ubxn10
ENSMUSG00000045620	59.06964534	3.156995794	0.532500827	5.928621389	3.05489E-09	6.07296E-08	Odf3l1
ENSMUSG00000071723	87.6193058	1.601224381	0.270103357	5.928191341	3.06289E-09	6.08379E-08	Gspt2
ENSMUSG00000106478	12.28533177	4.215970483	0.711554997	5.925010011	3.12278E-09	6.19239E-08	NA
ENSMUSG00000029438	287.2930117	1.033847253	0.174497941	5.92469599	3.12876E-09	6.1939E-08	Bcl7a
ENSMUSG00000001056	1892.516106	1.839795248	0.310556398	5.924190463	3.1384E-09	6.2078E-08	Nhp2
ENSMUSG00000002857	1787.356919	1.124352941	0.189924894	5.919987193	3.21967E-09	6.35797E-08	Rnf11
ENSMUSG00000026223	4290.914515	1.384996957	0.234097613	5.916322413	3.2922E-09	6.48502E-08	Itm2c
ENSMUSG00000029538	1219.68218	1.127914217	0.190685386	5.91505327	3.31768E-09	6.52981E-08	Srsf9
ENSMUSG00000034912	120.6650525	3.318277115	0.561315452	5.911608348	3.38783E-09	6.65135E-08	Mdga2
ENSMUSG00000049553	894.8776716	1.28539096	0.21768554	5.904806359	3.53061E-09	6.90883E-08	Polr1a
ENSMUSG00000037601	1865.424392	1.646360398	0.279234607	5.895975496	3.72474E-09	7.27673E-08	Nme1
ENSMUSG00000063316	5245.958913	1.002670369	0.170082578	5.895197388	3.74234E-09	7.30509E-08	Rpl27
ENSMUSG00000029838	827.157262	2.692229459	0.457063521	5.890274191	3.85555E-09	7.50758E-08	Ptn
ENSMUSG00000091337	1369.453893	1.027620911	0.174523756	5.888143437	3.90558E-09	7.59255E-08	Eid1
ENSMUSG00000023348	866.9352592	1.995311149	0.338948884	5.886761232	3.93837E-09	7.63704E-08	Trip6
ENSMUSG000000028541	217.1346522	1.502970925	0.25531284	5.886781588	3.93789E-09	7.63704E-08	B4galt2
ENSMUSG00000030351	43.86519648	3.040750792	0.516533216	5.886844631	3.93638E-09	7.63704E-08	Tspan11
ENSMUSG00000042804	267.7473327	1.914045159	0.325158305	5.886502454	3.94454E-09	7.63704E-08	Gpr153
ENSMUSG00000029312	215.0021714	2.260972542	0.384232827	5.884381507	3.99545E-09	7.72302E-08	Klhl8
ENSMUSG00000033436	369.9749893	2.198949727	0.373801058	5.8826739	4.03691E-09	7.79397E-08	Armxc2
ENSMUSG000000085111	64.20102486	4.360181504	0.741199755	5.882599762	4.03872E-09	7.79397E-08	Ascl4
ENSMUSG00000020706	1680.822291	1.373589897	0.233531726	5.881812813	4.05797E-09	7.81842E-08	Ftsj3
ENSMUSG00000041895	908.5693808	1.717056167	0.292388811	5.872509831	4.29246E-09	8.25014E-08	Wipi1
ENSMUSG00000056832	103.7751809	1.52030454	0.258895392	5.872273472	4.29859E-09	8.25524E-08	Ttc26
ENSMUSG00000018239	210.8367638	1.330331325	0.226574323	5.871500819	4.31867E-09	8.28435E-08	Zcchc10
ENSMUSG000000105134	176.5624568	2.573383222	0.438451473	5.869254369	4.37759E-09	8.38662E-08	NA
ENSMUSG00000068617	61.59253426	3.458873868	0.589701363	5.865466972	4.4787E-09	8.56651E-08	Efcab1
ENSMUSG00000037275	674.2272089	1.337433294	0.228202499	5.860730267	4.60836E-09	8.77128E-08	Gemin5
ENSMUSG00000022091	921.9960208	1.333114725	0.227540916	5.858791236	4.66248E-09	8.86096E-08	Sorbs3
ENSMUSG00000022089	1280.287561	1.043814814	0.178201053	5.857512044	4.69853E-09	8.92232E-08	Bin3
ENSMUSG00000018199	481.6847334	1.192145933	0.203553718	5.856664992	4.72254E-09	8.95361E-08	Trove2
ENSMUSG00000020435	73.56807378	2.481068269	0.423696279	5.855770732	4.74803E-09	8.99475E-08	Osbp2
ENSMUSG00000027030	1235.207865	1.782402596	0.304780718	5.848147512	4.97078E-09	9.38679E-08	Stk39
ENSMUSG00000037974	36.74639818	4.896831815	0.837636401	5.846011237	5.035E-09	9.48545E-08	Muc5ac
ENSMUSG00000018916	29.33449177	3.378116758	0.57792958	5.844563865	5.07897E-09	9.5607E-08	Csf2
ENSMUSG00000023387	10.33054435	5.29585055	0.90620363	5.843996177	5.09632E-09	9.58245E-08	Kcnk16
ENSMUSG00000036805	1172.906848	2.242504513	0.383732797	5.843921947	5.09859E-09	9.58245E-08	Noxa1
ENSMUSG00000089661	42.69592095	3.741435727	0.641050062	5.836417388	5.33352E-09	1.00081E-07	Mia
ENSMUSG00000025986	479.57488	2.111756296	0.362088703	5.832151838	5.47171E-09	1.02351E-07	Slc39a10
ENSMUSG00000022816	5214.671304	2.655883968	0.455481092	5.830942304	5.51152E-09	1.02853E-07	Fstl1
ENSMUSG00000069744	2615.128812	0.952091342	0.163521179	5.822434427	5.79966E-09	1.07975E-07	Psmb3

ENSMUSG00000022131	492.326669	1.085910825	0.186623599	5.818721901	5.92993E-09	1.10142E-07	Gpr180
ENSMUSG00000040466	1400.530743	2.431650649	0.418140096	5.815396979	6.04902E-09	1.12091E-07	Blvr
ENSMUSG00000027859	45.1512375	2.91566609	0.50143067	5.81469436	6.07448E-09	1.12475E-07	Ngf
ENSMUSG00000060572	215.9845536	2.549828522	0.439162958	5.806110186	6.39409E-09	1.18117E-07	Mfap2
ENSMUSG00000038236	431.5581336	2.178259857	0.375226444	5.805187479	6.4294E-09	1.18585E-07	Hoxa7
ENSMUSG00000057130	581.8542046	1.437231651	0.247714015	5.801979554	6.55366E-09	1.20782E-07	Txn14a
ENSMUSG00000085421	166.3139481	2.539349007	0.437855368	5.799515536	6.65068E-09	1.22148E-07	4732490B19Rik
ENSMUSG00000034675	570.3049643	1.908964712	0.329193047	5.798921726	6.67427E-09	1.22333E-07	Dbn1
ENSMUSG00000044927	329.252216	2.952517191	0.509159749	5.798803219	6.67898E-09	1.22333E-07	H1fx
ENSMUSG00000041594	804.752266	1.796666877	0.309865455	5.798216118	6.7024E-09	1.22573E-07	Tmtc4
ENSMUSG00000023733	344.2644657	2.6987497	0.465650768	5.795651774	6.80563E-09	1.24174E-07	Pf4
ENSMUSG00000066438	90.50188913	1.820910212	0.314867898	5.783092601	7.33397E-09	1.33506E-07	Plekhd1
ENSMUSG00000042821	168.2988294	2.30894271	0.399315819	5.782247031	7.37094E-09	1.34077E-07	Snai1
ENSMUSG00000025265	171.73227	1.764183073	0.305308332	5.778365306	7.54299E-09	1.36892E-07	Fgd1
ENSMUSG00000036545	1052.344652	3.369214854	0.583102958	5.77807882	7.55584E-09	1.3702E-07	Adamts2
ENSMUSG00000001521	369.2314706	1.778665488	0.307847347	5.777751549	7.57055E-09	1.37182E-07	Tulp3
ENSMUSG00000037239	201.5777002	2.130152988	0.369459583	5.765591384	8.1372E-09	1.46223E-07	Spred3
ENSMUSG00000024940	1419.012508	1.897150319	0.329195629	5.762987566	8.26379E-09	1.48162E-07	Ltbp3
ENSMUSG00000025151	3877.44427	1.746016205	0.303014407	5.762155745	8.30463E-09	1.48782E-07	Maged1
ENSMUSG00000023992	333.0875878	2.642784153	0.459450737	5.752051178	8.81671E-09	1.57363E-07	Trem2
ENSMUSG00000040621	107.4034545	1.589060496	0.276315742	5.750886592	8.87767E-09	1.58332E-07	Gemin8
ENSMUSG00000049001	277.5912518	2.81200707	0.489169357	5.748534795	9.00201E-09	1.60429E-07	Ndnf
ENSMUSG00000036412	164.9761206	3.150478799	0.548677189	5.741953305	9.35906E-09	1.66418E-07	Arsi
ENSMUSG00000001166	130.9871802	1.951687435	0.340246571	5.73609729	9.6883E-09	1.71886E-07	Oas1c
ENSMUSG00000041460	27.64767234	2.767674396	0.48257862	5.735178233	9.74099E-09	1.72563E-07	Cacna2d4
ENSMUSG00000036748	1464.167726	1.165198788	0.203209816	5.733969023	9.81073E-09	1.7358E-07	Cuedc2
ENSMUSG00000032640	375.0748073	1.841120373	0.321202646	5.731958921	9.92773E-09	1.75479E-07	Chsy1
ENSMUSG00000020177	19.28165395	5.605773299	0.978750778	5.727477747	1.01935E-08	1.79775E-07	9530003J23Rik
ENSMUSG00000068922	623.2302489	1.196992477	0.209196106	5.72186786	1.05359E-08	1.85127E-07	Msto1
ENSMUSG00000030562	65.38179535	3.096844571	0.54129412	5.721186423	1.05783E-08	1.85596E-07	Nox4
ENSMUSG00000024664	558.4333871	1.604353778	0.280582532	5.717938906	1.07824E-08	1.89038E-07	Fads3
ENSMUSG000000020053	695.3534004	2.161583625	0.378206391	5.71535457	1.09476E-08	1.91651E-07	Igf1
ENSMUSG00000032228	3319.839123	1.249360241	0.218708535	5.71244392	1.11365E-08	1.94672E-07	Tcf12
ENSMUSG00000016529	36.16494899	3.563904001	0.624417714	5.707563898	1.14605E-08	2.0004E-07	Il10
ENSMUSG00000022952	972.2668114	2.028903023	0.355660786	5.704601416	1.16616E-08	2.03103E-07	Runx1
ENSMUSG00000052751	416.4195159	1.486392977	0.260639535	5.70286844	1.17808E-08	2.04879E-07	Repin1
ENSMUSG00000033294	1009.645736	1.313403457	0.23032689	5.70234529	1.1817E-08	2.05358E-07	Noc4l
ENSMUSG00000028749	1625.470016	3.80220251	0.666801465	5.702150803	1.18305E-08	2.05443E-07	Pla2g2f
ENSMUSG00000025423	896.6696489	0.992606229	0.174244733	5.696621134	1.22205E-08	2.11288E-07	Pias2
ENSMUSG00000075304	917.0899829	3.290655653	0.577774592	5.695396955	1.23085E-08	2.12597E-07	Sp5
ENSMUSG00000098132	253.591444	3.635881413	0.638579397	5.693702974	1.24313E-08	2.14465E-07	Rassf10
ENSMUSG000000025372	650.8504155	1.150855837	0.202291697	5.689090832	1.27718E-08	2.20019E-07	Baiap2
ENSMUSG00000070953	513.3507262	1.22662852	0.215692037	5.686943928	1.29333E-08	2.2264E-07	Rabepk
ENSMUSG00000025722	490.5452116	1.123481138	0.197599375	5.685651273	1.30315E-08	2.24154E-07	Wdr73
ENSMUSG00000042808	10541.40746	2.161445688	0.380165513	5.685538565	1.30401E-08	2.24154E-07	Gpx2
ENSMUSG00000001473	1551.812938	2.177793465	0.383547399	5.678029546	1.36255E-08	2.33541E-07	Tubb6
ENSMUSG00000048485	38.43123461	2.752857291	0.485686734	5.667968868	1.445E-08	2.4696E-07	Zbtb8b
ENSMUSG00000039481	410.4912338	2.352279962	0.415133709	5.666318857	1.45898E-08	2.48991E-07	Nrtn
ENSMUSG00000018862	132.564483	4.277552579	0.75513311	5.664633851	1.47339E-08	2.51089E-07	Otop3
ENSMUSG00000027478	110.1264063	1.405075382	0.248508909	5.654024186	1.56734E-08	2.66146E-07	Dnmt3b
ENSMUSG00000018459	47.30777105	3.433317567	0.607855071	5.64825027	1.62089E-08	2.7465E-07	Slc13a3
ENSMUSG00000087658	39.89821626	2.160577176	0.382548221	5.647855759	1.62461E-08	2.75084E-07	Hotairm1
ENSMUSG00000004056	2440.550969	1.103011806	0.195321143	5.647170552	1.6311E-08	2.75789E-07	Akt2
ENSMUSG00000021994	798.5912532	1.61201767	0.285484344	5.646606214	1.63646E-08	2.76303E-07	Wnt5a
ENSMUSG00000071078	902.7826743	1.376028485	0.243763145	5.644940636	1.65238E-08	2.78397E-07	Nr2c2ap
ENSMUSG00000079478	416.9759116	1.442921961	0.255671646	5.643652644	1.6648E-08	2.8029E-07	Sssca1
ENSMUSG00000010021	163.2130955	3.3491437	0.593567945	5.64239314	1.67703E-08	2.8214E-07	Kif19a
ENSMUSG00000043421	540.3873088	2.558353114	0.453544249	5.640801576	1.6926E-08	2.84166E-07	Hilpda
ENSMUSG00000037681	230.5529826	3.170152252	0.562107688	5.639759638	1.70288E-08	2.85689E-07	Esy3
ENSMUSG00000029836	3521.579441	1.527553782	0.270910509	5.638591829	1.71446E-08	2.87227E-07	Cbx3
ENSMUSG00000033508	659.1434026	2.843438802	0.504351577	5.637810869	1.72226E-08	2.88329E-07	Asprv1
ENSMUSG00000089715	3169.407344	2.160062524	0.383532618	5.632017781	1.78113E-08	2.97348E-07	Cbx6
ENSMUSG00000067377	233.0499525	1.495330036	0.265633334	5.629301165	1.80941E-08	3.01857E-07	Tspan6
ENSMUSG00000026970	1823.432893	1.619819846	0.287913044	5.62607315	1.84358E-08	3.07126E-07	Rbms1
ENSMUSG00000009585	2095.849571	2.198045621	0.391128849	5.619748136	1.91236E-08	3.17915E-07	Apobec3
ENSMUSG00000017723	1327.013072	3.335864117	0.593706783	5.61870643	1.92392E-08	3.19508E-07	Wfdc2
ENSMUSG00000031465	330.3204954	1.811826362	0.322466914	5.618642661	1.92463E-08	3.19508E-07	Angpt2

ENSMUSG00000028339	1188.555029	2.655245761	0.47267271	5.617514409	1.93724E-08	3.21376E-07	Col15a1
ENSMUSG00000053522	95.36361194	3.58019269	0.637352222	5.61729067	1.93975E-08	3.21568E-07	Lgals7
ENSMUSG00000053644	900.3071718	1.573009918	0.280064223	5.616604295	1.94747E-08	3.22622E-07	Aldh7a1
ENSMUSG00000032363	285.2317104	2.811098268	0.500597474	5.61548632	1.9601E-08	3.24263E-07	Adamts7
ENSMUSG00000089663	24.76140597	3.295244603	0.586916378	5.614504425	1.97126E-08	3.25883E-07	NA
ENSMUSG00000111293	37.91669543	3.234129602	0.576046914	5.614351063	1.97301E-08	3.25945E-07	NA
ENSMUSG00000105987	4919.969491	1.064940041	0.189764623	5.611899767	2.00117E-08	3.29909E-07	Al506816
ENSMUSG00000026520	777.2207662	1.59878577	0.28503774	5.609031878	2.03462E-08	3.34725E-07	Pycr2
ENSMUSG00000030366	34.20839974	3.475435278	0.619967273	5.605836682	2.07251E-08	3.40253E-07	Ceacam12
ENSMUSG00000053080	418.0442608	1.226005666	0.21882436	5.602692803	2.11047E-08	3.46007E-07	2700081015Rik
ENSMUSG00000073051	14.22674658	4.959334797	0.885216566	5.602397185	2.11407E-08	3.46358E-07	Gm14812
ENSMUSG00000040591	310.0871145	1.650078193	0.294662414	5.599893687	2.14483E-08	3.50914E-07	1110051M20Rik
ENSMUSG00000028840	406.035549	1.303767845	0.232923469	5.597408666	2.17579E-08	3.55245E-07	Zfp593
ENSMUSG00000040945	4829.500082	1.601772756	0.286385008	5.593074745	2.23083E-08	3.63981E-07	Rcc2
ENSMUSG00000092600	15.20367488	3.069890729	0.549201877	5.589730953	2.27422E-08	3.70805E-07	NA
ENSMUSG00000024537	511.0618661	1.098754494	0.196734215	5.584969005	2.33742E-08	3.80327E-07	Psmg2
ENSMUSG00000001555	1005.936578	2.416153045	0.43302134	5.579755136	2.40857E-08	3.91139E-07	Fkbp10
ENSMUSG00000031594	178.9967472	3.342943611	0.599121959	5.579738082	2.40881E-08	3.91139E-07	Fgl1
ENSMUSG00000015852	84.7894284	3.681172571	0.660012238	5.577430781	2.44097E-08	3.9582E-07	Fcrls
ENSMUSG00000001131	2132.461339	3.480934821	0.624999963	5.569496045	2.55477E-08	4.13347E-07	Timp1
ENSMUSG00000085141	30.36299677	4.873494687	0.875044004	5.569428128	2.55577E-08	4.13347E-07	NA
ENSMUSG00000053647	100.5348499	3.19706456	0.574119231	5.568642172	2.56732E-08	4.14893E-07	Gper1
ENSMUSG00000020844	880.0461938	1.554983259	0.279314339	5.567144403	2.58948E-08	4.17621E-07	Nxn
ENSMUSG00000028698	404.0528386	1.477941028	0.265532168	5.565958505	2.60715E-08	4.20187E-07	Pik3r3
ENSMUSG00000029360	22.37479929	5.569393548	1.001041558	5.563598735	2.64267E-08	4.25334E-07	NA
ENSMUSG00000050052	190.7799836	2.55441855	0.459184564	5.562945165	2.65259E-08	4.26642E-07	Tdrp
ENSMUSG00000025492	7939.592338	2.184313711	0.392843092	5.560270131	2.69357E-08	4.32647E-07	Ifitm3
ENSMUSG00000036764	142.8639023	1.855836527	0.333838463	5.559085394	2.71192E-08	4.35006E-07	Dnajc12
ENSMUSG00000059674	109.4185887	2.070520914	0.372839688	5.553381195	2.80196E-08	4.49146E-07	Cdh24
ENSMUSG00000079555	307.8843095	1.051345339	0.189520548	5.547394993	2.89957E-08	4.6323E-07	Haus3
ENSMUSG00000031297	74.06256804	3.170622548	0.571774803	5.545229575	2.93569E-08	4.68055E-07	Slc7a3
ENSMUSG000000029279	11.746093075	1.792261345	0.323235692	5.544750746	2.94373E-08	4.69023E-07	Brdt
ENSMUSG00000056758	268.0002383	2.273986375	0.410349682	5.541581906	2.99751E-08	4.76633E-07	Hmga2
ENSMUSG00000047854	26.15084221	2.709692185	0.489173269	5.539330041	3.03631E-08	4.82156E-07	Stx19
ENSMUSG00000015647	3840.544315	1.714594475	0.309544377	5.539091017	3.04046E-08	4.82492E-07	Lama5
ENSMUSG00000025579	2858.424584	1.465244911	0.264579136	5.538021377	3.05908E-08	4.85123E-07	Gaa
ENSMUSG00000110266	56.7341544	1.767078966	0.319286342	5.534464633	3.1218E-08	4.94411E-07	Gm32742
ENSMUSG00000014075	172.1167426	1.358059401	0.245522392	5.531305677	3.17856E-08	5.02394E-07	Tctex1d2
ENSMUSG00000017446	647.9435682	2.067652777	0.374046542	5.527795463	3.2428E-08	5.12207E-07	C1qtnf1
ENSMUSG00000033904	224.4837697	1.065710459	0.192937368	5.523608367	3.32107E-08	5.23179E-07	Ccp110
ENSMUSG00000022421	307.276042	1.556072836	0.281769659	5.522499623	3.34211E-08	5.25447E-07	Nptxr
ENSMUSG000000097097	11.74882343	4.819210921	0.873182389	5.519134358	3.40674E-08	5.34547E-07	NA
ENSMUSG00000056632	12.21159399	4.469861878	0.809935447	5.518787815	3.41346E-08	5.35249E-07	Dsg3
ENSMUSG00000029103	1732.394789	1.1059899	0.200564304	5.514390528	3.49991E-08	5.48442E-07	Lrpap1
ENSMUSG00000020015	748.4496167	1.363810438	0.247431409	5.51187274	3.55036E-08	5.55249E-07	Cdk17
ENSMUSG00000005883	57.28031496	2.850716649	0.517344005	5.510292229	3.58238E-08	5.59521E-07	Spo11
ENSMUSG00000001248	1773.263403	1.911340392	0.347120914	5.506266874	3.66523E-08	5.70584E-07	Gramd1a
ENSMUSG00000089804	150.9013582	1.588348667	0.288450653	5.50648318	3.66073E-08	5.70584E-07	LOC105245924
ENSMUSG00000000416	231.3614316	2.239278579	0.407149089	5.49989829	3.8001E-08	5.89649E-07	Cttnbp2
ENSMUSG00000032258	59.65853046	1.99959554	0.363826187	5.496018734	3.88461E-08	6.01976E-07	Lca5
ENSMUSG00000018620	47.05966448	2.744463136	0.499939701	5.489588301	4.02872E-08	6.23493E-07	Mmp20
ENSMUSG00000028040	399.0278142	1.818123621	0.331491005	5.48468464	4.14208E-08	6.39371E-07	Efn4
ENSMUSG00000072949	253.7502317	1.868955315	0.340882476	5.482696961	4.1889E-08	6.4576E-07	Acot1
ENSMUSG00000073000	215.4909461	2.192999415	0.40028643	5.478575464	4.28764E-08	6.59269E-07	NA
ENSMUSG00000000792	48.20244015	2.571245624	0.469415672	5.477545333	4.31267E-08	6.61833E-07	Slc5a5
ENSMUSG00000023147	279.7099722	1.335481091	0.243825049	5.477210395	4.32083E-08	6.62645E-07	Wrb
ENSMUSG00000042446	580.6774077	0.981882494	0.179270523	5.477099515	4.32354E-08	6.62645E-07	Zmym4
ENSMUSG000000051159	37.60480106	4.385876785	0.801240987	5.473854752	4.4035E-08	6.74465E-07	Cited1
ENSMUSG00000093424	22.8844344	2.333715377	0.426529476	5.47140469	4.46482E-08	6.82099E-07	NA
ENSMUSG00000020949	940.3150269	1.335948465	0.244234172	5.469948999	4.50165E-08	6.87283E-07	Fkbp3
ENSMUSG00000043687	31.08046099	2.7812901	0.508686894	5.467587499	4.56202E-08	6.95159E-07	1190005106Rik
ENSMUSG00000038034	1658.520789	1.616641034	0.295692324	5.467308093	4.56921E-08	6.95809E-07	Igsf8
ENSMUSG00000023411	561.7603165	1.980267649	0.362501854	5.462779372	4.68737E-08	7.12432E-07	Nfatc4
ENSMUSG00000002059	508.7048709	1.891780146	0.346326932	5.462411292	4.6971E-08	7.12999E-07	Rab34
ENSMUSG00000030107	324.4460882	2.966747886	0.543294434	5.460663135	4.74359E-08	7.19597E-07	Usp18
ENSMUSG00000047749	112.9567522	1.876995128	0.343834455	5.459008254	4.78802E-08	7.25872E-07	Zc3hav1l
ENSMUSG00000026042	4653.275673	3.24021996	0.593685247	5.457807777	4.82049E-08	7.30329E-07	Col5a2



ENSMUSG00000006519	5075.722479	1.85444385	0.340080999	5.452947543	4.95417E-08	7.49626E-07	Cyba
ENSMUSG00000049848	23.13346821	3.53255021	0.648026883	5.451240224	5.00197E-08	7.56378E-07	Ceacam19
ENSMUSG00000086126	22.5905799	5.186398196	0.951473626	5.450911151	5.01124E-08	7.57297E-07	Evx1os
ENSMUSG00000018593	16496.46046	3.00150637	0.55081858	5.449174157	5.06042E-08	7.64243E-07	Sparc
ENSMUSG00000031434	351.9298105	2.172470821	0.398715748	5.448670724	5.07477E-08	7.65922E-07	Morc4
ENSMUSG00000078576	9.713503293	5.099726356	0.936512063	5.445446523	5.16756E-08	7.78443E-07	Gm12886
ENSMUSG00000034563	231.5711045	1.130005753	0.207553239	5.444413962	5.19762E-08	7.8198E-07	Ccpg1
ENSMUSG00000000884	261.1290173	2.178746448	0.400236465	5.443648041	5.22003E-08	7.84855E-07	Gnb1l
ENSMUSG00000038797	109.0003425	1.707317904	0.313694106	5.442620284	5.25025E-08	7.88899E-07	Zscan2
ENSMUSG00000035478	1949.787047	0.858496727	0.15782526	5.439539443	5.34185E-08	8.00637E-07	Mbd3
ENSMUSG00000028358	194.8433563	2.088263119	0.384466797	5.431582487	5.58565E-08	8.34021E-07	Zfp618
ENSMUSG00000038641	59.61686667	4.65166486	0.856931369	5.428281688	5.68992E-08	8.47991E-07	Akr1d1
ENSMUSG00000028484	954.5545498	1.169604804	0.215504638	5.427283682	5.72181E-08	8.51676E-07	Psip1
ENSMUSG00000024909	657.4497293	1.843658839	0.339882106	5.424406887	5.81473E-08	8.64422E-07	Efemp2
ENSMUSG00000026944	741.503789	1.128929197	0.208212333	5.422009251	5.89328E-08	8.75552E-07	Abca2
ENSMUSG00000027533	704.147792	2.226858655	0.410994447	5.41822078	6.01951E-08	8.9263E-07	Fabp5
ENSMUSG00000033717	399.6196164	1.434996892	0.265031416	5.414440726	6.14806E-08	9.08856E-07	Adra2a
ENSMUSG00000032184	262.1516779	1.320556089	0.243943679	5.413364648	6.18514E-08	9.13201E-07	Lysmd2
ENSMUSG00000020814	311.8879751	0.995714188	0.183981041	5.412047798	6.23081E-08	9.18802E-07	Mxra7
ENSMUSG00000072582	647.5741065	1.175241905	0.217265007	5.409255369	6.32873E-08	9.31508E-07	Pthr2
ENSMUSG00000060098	819.7777232	1.107725752	0.204955311	5.404718459	6.49103E-08	9.53623E-07	Prmt7
ENSMUSG00000028565	1147.261156	1.143184356	0.211727054	5.399330585	6.689E-08	9.80888E-07	Nfia
ENSMUSG00000064125	74.02331828	2.224238659	0.412162221	5.396512696	6.79486E-08	9.93346E-07	Prr36
ENSMUSG00000051439	2070.469816	2.663346026	0.494135184	5.389913759	7.04915E-08	1.02799E-06	Cd14
ENSMUSG00000031700	636.1223595	1.777040344	0.330043932	5.384253954	7.27457E-08	1.05827E-06	Gpt2
ENSMUSG00000024269	192.1284159	1.232754621	0.229098776	5.380886989	7.41197E-08	1.07562E-06	Tpgs2
ENSMUSG00000031342	377.6270036	2.233827474	0.415309918	5.378700038	7.50256E-08	1.0881E-06	Gpm6b
ENSMUSG00000049482	620.9432512	0.896554286	0.166782834	5.375578921	7.6337E-08	1.10375E-06	Ctu2
ENSMUSG00000003824	237.8290629	2.435269085	0.453035722	5.375446057	7.63933E-08	1.10389E-06	Syce2
ENSMUSG00000045136	381.7489923	1.907470111	0.355166239	5.370640277	7.84576E-08	1.13097E-06	Tubb2b
ENSMUSG00000052926	1009.40224	1.454469427	0.270892438	5.369176926	7.90968E-08	1.1388E-06	Rnaseh2a
ENSMUSG00000006888	469.7301477	1.76101181	0.328101061	5.367284708	7.99308E-08	1.14733E-06	Glipr1
ENSMUSG00000026604	670.6184915	1.666711682	0.310542952	5.367089066	8.00175E-08	1.14788E-06	Ptpn14
ENSMUSG00000036938	10.83643782	4.748467687	0.88510198	5.364882008	8.10022E-08	1.16131E-06	Try5
ENSMUSG00000046432	1314.950335	1.716316253	0.319983792	5.363759969	8.15072E-08	1.16714E-06	Bex3
ENSMUSG00000040282	259.845319	0.98410654	0.1835253	5.362239112	8.21966E-08	1.17489E-06	BC052040
ENSMUSG00000016541	1438.116558	1.761781772	0.328669274	5.360348259	8.30617E-08	1.18654E-06	Atxn10
ENSMUSG00000000531	319.5158267	1.240607405	0.231507848	5.358813612	8.37702E-08	1.19594E-06	Grasp
ENSMUSG00000010751	96.49602128	2.396327661	0.447409895	5.356000592	8.50842E-08	1.21251E-06	Tnfrsf22
ENSMUSG00000053801	735.3474239	1.540309016	0.287597288	5.355784217	8.51861E-08	1.21324E-06	Grwd1
ENSMUSG00000026435	821.6162366	2.380003909	0.444584052	5.35332723	8.63515E-08	1.22763E-06	Slc45a3
ENSMUSG000000069631	319.3263282	1.296555841	0.242328447	5.350407083	8.77566E-08	1.24537E-06	Strada
ENSMUSG00000020776	637.5497158	1.695224081	0.316998047	5.347742985	8.90578E-08	1.26308E-06	Fbf1
ENSMUSG00000020388	464.5269182	2.260403824	0.423144303	5.34192191	9.19663E-08	1.29967E-06	Pdlim4
ENSMUSG00000041674	48.01483557	3.328641812	0.623337142	5.340034452	9.29289E-08	1.31094E-06	BC006965
ENSMUSG00000036872	15.04695786	3.8179685	0.715063677	5.339340571	9.32853E-08	1.31518E-06	Abcc12
ENSMUSG00000028573	241.06621	1.877463352	0.35164932	5.3390217	9.34495E-08	1.31672E-06	Fggy
ENSMUSG00000042660	383.2054972	0.839983477	0.157397229	5.336710698	9.46479E-08	1.33123E-06	Wdr55
ENSMUSG00000020674	1094.980054	1.862453576	0.349323675	5.33159849	9.7352E-08	1.36362E-06	Pxdn
ENSMUSG00000063060	85.02812405	1.886645576	0.35436738	5.323982064	1.0152E-07	1.41782E-06	Sox7
ENSMUSG00000021747	50.33859685	2.622867286	0.492823348	5.322124642	1.02562E-07	1.43069E-06	4930452B06Rik
ENSMUSG00000031365	440.5987717	1.189161347	0.223512387	5.320337566	1.03575E-07	1.44397E-06	Zfp275
ENSMUSG00000038210	13.34515923	5.222770721	0.98171081	5.320070503	1.03727E-07	1.44524E-06	Hoxa11
ENSMUSG00000029716	46.03162474	2.993179213	0.562823666	5.318147396	1.04829E-07	1.45889E-06	Tfr2
ENSMUSG00000035678	272.5468831	2.59531801	0.488040787	5.317830149	1.05012E-07	1.46058E-06	Tnfsf9
ENSMUSG00000038884	401.2899191	1.480988818	0.278581178	5.316184062	1.05966E-07	1.47298E-06	A230050P20Rik
ENSMUSG00000023495	545.4627597	1.733273522	0.326128529	5.314694569	1.06836E-07	1.48161E-06	Pcbp4
ENSMUSG00000024666	171.8505793	1.469223745	0.276520718	5.313250154	1.07687E-07	1.49126E-06	Tmem138
ENSMUSG00000027995	672.0605866	2.458918209	0.462794716	5.313194222	1.0772E-07	1.49126E-06	Tlr2
ENSMUSG00000056612	2070.32976	1.609572719	0.303000848	5.312106319	1.08365E-07	1.49757E-06	Ppp1r14b
ENSMUSG00000105974	52.90964153	2.572561189	0.484278911	5.312147883	1.08341E-07	1.49757E-06	NA
ENSMUSG00000039252	585.5557105	2.537853771	0.477820185	5.311315533	1.08837E-07	1.50234E-06	Lgi2
ENSMUSG00000033389	296.5965118	1.836427733	0.346822214	5.295011856	1.19009E-07	1.63326E-06	Arhgap44
ENSMUSG00000031730	324.2038941	0.980449546	0.185302954	5.291062686	1.21608E-07	1.66412E-06	Dhodh
ENSMUSG00000042439	260.5118797	1.19292647	0.225455876	5.291174881	1.21533E-07	1.66412E-06	Zfp532
ENSMUSG00000026700	12.48365171	4.36348472	0.825084246	5.288532343	1.23302E-07	1.68633E-06	Tnfsf4
ENSMUSG00000021262	1039.239727	2.220769179	0.419957654	5.288078831	1.23608E-07	1.68954E-06	Evl



ENSMUSG00000053783	32.02435046	2.504750093	0.47376542	5.286899358	1.24407E-07	1.69949E-06	1700016K19Rik
ENSMUSG00000031907	274.3325569	1.038087634	0.196512266	5.282558983	1.27392E-07	1.73827E-06	Zfp90
ENSMUSG00000053646	1122.093009	2.081982715	0.394165194	5.282005485	1.27777E-07	1.74253E-06	Plxbn1
ENSMUSG00000031740	4735.059656	3.06569997	0.580448011	5.281609911	1.28054E-07	1.74429E-06	Mmp2
ENSMUSG00000040836	140.408929	1.516737109	0.287171641	5.281639594	1.28033E-07	1.74429E-06	Gpr161
ENSMUSG00000021782	1081.493189	0.758264801	0.143629182	5.279322703	1.29662E-07	1.76519E-06	Dlg5
ENSMUSG00000000085	955.6541903	1.447627233	0.274395954	5.275687232	1.32259E-07	1.79952E-06	Scmh1
ENSMUSG00000029602	98.80579334	2.852668714	0.540731509	5.275573303	1.32342E-07	1.7996E-06	Rasal1
ENSMUSG00000022415	757.0885065	1.513851448	0.287232317	5.270477443	1.36069E-07	1.84607E-06	Syngn1
ENSMUSG00000004562	719.4999843	1.446696362	0.274522191	5.269870379	1.3652E-07	1.85113E-06	Arhgef40
ENSMUSG00000038463	341.6397092	1.902445051	0.36105705	5.269098197	1.37096E-07	1.85787E-06	Olfml2b
ENSMUSG00000070880	39.52302432	3.274687061	0.621555089	5.268538731	1.37514E-07	1.86248E-06	Gad1
ENSMUSG00000038872	373.6654059	1.787148419	0.339306171	5.267067243	1.3862E-07	1.87639E-06	Zfhx3
ENSMUSG00000063018	89.8721748	1.922398263	0.3652002	5.263957313	1.40987E-07	1.90517E-06	NA
ENSMUSG00000018585	2394.137126	1.208356311	0.229778265	5.258792915	1.45004E-07	1.95279E-06	Atox1
ENSMUSG00000001525	11804.86621	1.688994497	0.321650901	5.251017467	1.51261E-07	2.02786E-06	Tubb5
ENSMUSG00000052911	1392.866294	0.966307615	0.184112676	5.248457827	1.53378E-07	2.05507E-06	Lamb2
ENSMUSG00000067998	109.4678817	5.575664378	1.062725138	5.246572401	1.54955E-07	2.07386E-06	Bpifb9a
ENSMUSG00000063851	47.21649863	2.460462574	0.468988441	5.246318154	1.55169E-07	2.07556E-06	Rnf183
ENSMUSG00000049881	283.3184373	1.354348514	0.258311656	5.243079373	1.57919E-07	2.11115E-06	2810025M15Rik
ENSMUSG00000023467	24.00954495	3.38368821	0.64545692	5.242314563	1.58575E-07	2.11873E-06	Tulp2
ENSMUSG000000084897	156.7790831	2.103959141	0.401388929	5.241696985	1.59106E-07	2.12464E-06	a
ENSMUSG00000044066	420.4873588	1.209292192	0.230759164	5.240494763	1.60147E-07	2.13733E-06	Cep68
ENSMUSG00000041879	1037.551651	0.705946321	0.134773255	5.238029774	1.623E-07	2.15758E-06	Ipo9
ENSMUSG00000067750	15.71812209	3.825940788	0.730462766	5.237694466	1.62595E-07	2.15909E-06	Khdc1a
ENSMUSG00000037890	213.5147056	1.509958207	0.288378062	5.236037012	1.64061E-07	2.17612E-06	Wdr19
ENSMUSG00000020935	843.4286221	1.305962557	0.249536924	5.233544354	1.6629E-07	2.20077E-06	Dckad
ENSMUSG00000035615	65.50458563	1.981840908	0.378727341	5.232896312	1.66874E-07	2.20728E-06	Frmpd1
ENSMUSG00000026425	586.0304015	1.332137496	0.254595143	5.232375925	1.67345E-07	2.21104E-06	Srgap2
ENSMUSG00000029570	417.9701974	1.475607383	0.282014132	5.232388078	1.67334E-07	2.21104E-06	Lfng
ENSMUSG00000009535	963.2635646	1.133098262	0.216677255	5.229428739	1.70035E-07	2.24283E-06	Rnmt
ENSMUSG000000028348	27.62663522	2.92663419	0.559899829	5.227067482	1.7222E-07	2.27039E-06	Murc
ENSMUSG00000069808	633.6419863	1.878630177	0.359569951	5.224658431	1.74477E-07	2.29506E-06	Fam57a
ENSMUSG00000041949	211.1406381	1.423183833	0.27259021	5.220964588	1.77994E-07	2.33743E-06	Tango6
ENSMUSG00000030291	580.5350792	1.114445492	0.213470735	5.220600814	1.78344E-07	2.33977E-06	Med21
ENSMUSG00000005917	12.91425292	4.430297825	0.849656502	5.214222237	1.8459E-07	2.41339E-06	Otx1
ENSMUSG00000036992	402.4626491	1.377709082	0.264235756	5.213938875	1.84872E-07	2.41575E-06	Nxt1
ENSMUSG00000070576	297.7664217	1.285119577	0.246499801	5.213471062	1.85339E-07	2.42052E-06	Mn1
ENSMUSG00000017176	455.3909662	1.240842589	0.23802183	5.213146153	1.85665E-07	2.42343E-06	Nt5c3b
ENSMUSG00000086316	293.3357539	0.975933158	0.187241826	5.2121536	1.86661E-07	2.4351E-06	2210013O21Rik
ENSMUSG00000019461	1157.827317	1.199882226	0.230215822	5.211988541	1.86827E-07	2.43593E-06	Plscr3
ENSMUSG000000097768	7.045895637	4.802345505	0.922793263	5.204140187	1.94897E-07	2.53697E-06	NA
ENSMUSG00000029659	315.6631556	2.570827646	0.494053699	5.203538913	1.95529E-07	2.5438E-06	Medag
ENSMUSG00000027562	557.6756898	1.737485754	0.333914913	5.203378721	1.95697E-07	2.5446E-06	Car2
ENSMUSG00000022325	254.6300902	1.526096857	0.293303343	5.203134887	1.95955E-07	2.54655E-06	Pop1
ENSMUSG00000038047	399.3286587	1.077579466	0.207206306	5.200514828	1.98737E-07	2.5813E-06	Haus6
ENSMUSG00000108670	12.60353516	2.970702171	0.571463086	5.19841481	2.00995E-07	2.60635E-06	NA
ENSMUSG00000017466	4376.892476	1.735873445	0.334165777	5.194647575	2.05108E-07	2.65675E-06	Timp2
ENSMUSG00000087341	58.96873624	3.101607035	0.597160463	5.193925632	2.05905E-07	2.66276E-06	0610040F04Rik
ENSMUSG00000033285	840.4098755	0.916578401	0.176559093	5.191340663	2.08785E-07	2.6956E-06	Wdr3
ENSMUSG00000030505	428.646159	0.859550348	0.165600209	5.190514883	2.09713E-07	2.70611E-06	Prmt3
ENSMUSG00000058392	493.9635852	1.281794845	0.247164792	5.185992847	2.14867E-07	2.7696E-06	Rrp1b
ENSMUSG00000033545	1265.968357	1.159982928	0.223831307	5.182398051	2.19051E-07	2.82201E-06	Znrf1
ENSMUSG00000023017	90.64499168	2.325101469	0.44891764	5.179349752	2.22661E-07	2.86695E-06	Asic1
ENSMUSG00000026782	339.8302973	1.271329422	0.245499218	5.178547748	2.2362E-07	2.87618E-06	Abi2
ENSMUSG00000021702	1480.042959	2.386481705	0.460963291	5.177162153	2.25286E-07	2.89605E-06	Thbs4
ENSMUSG00000021508	1100.453879	1.736923519	0.335518579	5.17683261	2.25685E-07	2.8996E-06	Cxcl14
ENSMUSG00000028741	852.6415197	1.420931496	0.274846603	5.169907433	2.3421E-07	3.00264E-06	Mrto4
ENSMUSG00000035373	264.1224249	3.150508576	0.610085503	5.164044324	2.4167E-07	3.08497E-06	Ccl7
ENSMUSG00000005131	19.84225591	2.488857755	0.482308416	5.160303391	2.4655E-07	3.14363E-06	4930550C14Rik
ENSMUSG00000051232	476.7672335	0.972470198	0.188455274	5.160217479	2.46663E-07	3.14363E-06	Tmem199
ENSMUSG000000083494	15.78304475	5.211937974	1.010146571	5.159585871	2.47497E-07	3.15256E-06	NA
ENSMUSG00000031548	1960.54339	2.68981499	0.521551499	5.157333445	2.50491E-07	3.18559E-06	Sfrp1
ENSMUSG00000035270	85.34666557	1.628358073	0.315904342	5.154592254	2.54183E-07	3.22735E-06	Impg2
ENSMUSG00000037594	117.3947918	1.366193199	0.265041034	5.154647854	2.54108E-07	3.22735E-06	BC022687
ENSMUSG00000060591	2383.189986	1.47781682	0.286984557	5.149464608	2.61231E-07	3.30624E-06	Ifitm2
ENSMUSG00000025665	130.3071648	2.33049102	0.453345618	5.140649709	2.7379E-07	3.45231E-06	Rps6ka6

ENSMUSG00000015957	64.16191246	1.831337024	0.356302742	5.139834221	2.74981E-07	3.46549E-06	Wnt11
ENSMUSG00000000149	1511.564249	1.031638091	0.20074034	5.139166803	2.75959E-07	3.47413E-06	Gna12
ENSMUSG000000032011	1016.240194	2.148734794	0.418285509	5.137005099	2.79151E-07	3.5106E-06	Thy1
ENSMUSG000000020656	91.37007753	1.60089581	0.311741423	5.135332342	2.81646E-07	3.54009E-06	Grhl1
ENSMUSG000000079652	21.91917389	3.01014438	0.586261769	5.134471562	2.82938E-07	3.55445E-06	Fam71f2
ENSMUSG000000020918	1228.157987	1.219651339	0.237725517	5.130502405	2.8897E-07	3.62831E-06	Kat2a
ENSMUSG000000092300	53.93702528	1.814803932	0.353747109	5.130229726	2.89389E-07	3.63165E-06	Cdk3-ps
ENSMUSG000000040693	21.62501385	3.467017767	0.675969228	5.128957984	2.9135E-07	3.65434E-06	Slco4c1
ENSMUSG000000054169	1228.485816	2.939235856	0.573210262	5.127674874	2.93342E-07	3.67544E-06	Ceacam10
ENSMUSG000000059654	495.758192	4.337310279	0.84633662	5.124805162	2.97846E-07	3.7299E-06	Reg1
ENSMUSG000000085903	16.71591308	4.887081523	0.95416916	5.12181878	3.02603E-07	3.78202E-06	NA
ENSMUSG000000059455	10.45584827	4.99347921	0.976873815	5.111693172	3.19284E-07	3.98367E-06	Plac8l1
ENSMUSG000000020921	323.3949025	1.143139738	0.223708793	5.109945496	3.22252E-07	4.01735E-06	Tmem101
ENSMUSG000000026966	910.273601	1.081180555	0.211744292	5.106067067	3.28933E-07	4.09546E-06	Ssna1
ENSMUSG000000074825	508.3509797	1.166523263	0.228468124	5.105846906	3.29316E-07	4.09808E-06	Itpr1p1
ENSMUSG000000035781	2977.292199	1.024605941	0.200764164	5.103530031	3.33376E-07	4.14209E-06	R3hdm4
ENSMUSG000000030086	236.7473048	1.900743463	0.372533228	5.102211883	3.35707E-07	4.16887E-06	Chchd6
ENSMUSG000000028044	707.6042991	2.166704004	0.424911235	5.099192085	3.41106E-07	4.22708E-06	Cks1b
ENSMUSG000000027249	82.29491018	3.976631905	0.780179021	5.09707618	3.4494E-07	4.27236E-06	F2
ENSMUSG000000020453	725.108825	1.28809927	0.252788544	5.095560302	3.47711E-07	4.3022E-06	Pat21
ENSMUSG000000037447	742.6829708	1.223232639	0.240133924	5.093960152	3.5066E-07	4.33643E-06	Arid5a
ENSMUSG000000043909	660.3539037	1.245395044	0.244553961	5.092516337	3.53342E-07	4.36733E-06	Trp53bp1
ENSMUSG000000107879	20.99417102	2.576726933	0.506230094	5.090031124	3.58005E-07	4.42035E-06	9330102E08Rik
ENSMUSG000000022323	381.0241586	1.415936053	0.278190959	5.089798961	3.58443E-07	4.42347E-06	Rida
ENSMUSG000000086448	160.8251518	1.717286995	0.337598991	5.086765781	3.64221E-07	4.49244E-06	NA
ENSMUSG000000031917	859.7484126	1.241063161	0.244096346	5.08431683	3.68952E-07	4.54371E-06	Nip7
ENSMUSG000000022995	1393.863108	1.43027353	0.281378613	5.083092544	3.71339E-07	4.56837E-06	Enah
ENSMUSG000000005339	17.25326694	3.599990515	0.708292495	5.082632587	3.72239E-07	4.57708E-06	Fcer1a
ENSMUSG000000026193	17504.29099	2.311057167	0.454876482	5.080625753	3.76194E-07	4.61614E-06	Fn1
ENSMUSG000000067780	476.7115687	3.653180942	0.719434519	5.077850515	3.81729E-07	4.67923E-06	Pi15
ENSMUSG000000020262	237.0849041	1.829288804	0.360501818	5.074284549	3.88957E-07	4.76291E-06	Adarb1
ENSMUSG000000030600	81.12718548	2.137129425	0.421239671	5.073428673	3.90711E-07	4.77795E-06	Lrfn1
ENSMUSG000000058145	158.4592598	2.613695329	0.515169766	5.073464129	3.90638E-07	4.77795E-06	Adamts17
ENSMUSG000000038481	993.9428592	0.77358891	0.152528221	5.071775607	3.94121E-07	4.81127E-06	Cdk19
ENSMUSG000000025329	12.84672686	3.603736838	0.710776321	5.070141947	3.97519E-07	4.84777E-06	Padi1
ENSMUSG000000099143	7.198354811	4.761469647	0.939442995	5.068396564	4.01181E-07	4.88741E-06	NA
ENSMUSG000000041801	295.4847596	2.000237344	0.394993473	5.06397569	4.10602E-07	4.99706E-06	Phlda3
ENSMUSG000000046449	121.3673113	2.59784729	0.513484342	5.059253177	4.20902E-07	5.10932E-06	C77370
ENSMUSG000000050737	1011.957605	2.303869143	0.455412366	5.058863819	4.21762E-07	5.11715E-06	Ptges
ENSMUSG000000054723	588.1421917	1.008457656	0.199407056	5.057281705	4.25275E-07	5.15714E-06	Vmac
ENSMUSG000000060621	20.755486	3.033654808	0.600201157	5.054396798	4.31753E-07	5.22769E-06	Nkpd1
ENSMUSG000000030588	381.5951854	1.655227614	0.327538065	5.053542754	4.33689E-07	5.24846E-06	Yif1b
ENSMUSG000000030079	554.4376663	1.317166454	0.261041558	5.045811338	4.51601E-07	5.45688E-06	Ruvbl1
ENSMUSG00000005124	415.8682712	2.81220896	0.557370999	5.045488492	4.52364E-07	5.46333E-06	Wisp1
ENSMUSG000000048699	39.77070525	3.512236002	0.696705797	5.041203932	4.62612E-07	5.57293E-06	Krt90
ENSMUSG000000029816	1169.110451	2.727029002	0.541289841	5.038019923	4.70372E-07	5.65781E-06	Gpnmb
ENSMUSG000000029401	656.1030667	1.135470819	0.225425615	5.037008862	4.72863E-07	5.68488E-06	Rilpl2
ENSMUSG000000043164	10.47169786	3.632137242	0.721208874	5.036179357	4.74916E-07	5.70667E-06	Tmem212
ENSMUSG000000036158	373.300028	1.780167088	0.353570326	5.034831701	4.78269E-07	5.74116E-06	Prickle1
ENSMUSG000000029675	1576.713108	1.890298414	0.375699166	5.03141498	4.86873E-07	5.8356E-06	Eln
ENSMUSG000000025383	17.87270608	3.361913992	0.668216877	5.031171927	4.87491E-07	5.83908E-06	Il23a
ENSMUSG000000024732	606.6526701	1.039260051	0.206660196	5.028835106	4.93469E-07	5.8968E-06	Ccdc86
ENSMUSG000000022837	196.5013477	1.359273024	0.27033521	5.028102058	4.95358E-07	5.91641E-06	Iqcb1
ENSMUSG000000059401	109.3798159	1.539546536	0.306355865	5.025353552	5.02506E-07	5.99274E-06	Mamld1
ENSMUSG000000086610	28.24873153	2.061097751	0.410881411	5.016283768	5.26805E-07	6.26993E-06	Gm15408
ENSMUSG000000084847	8.879239684	4.492230397	0.895754964	5.015021493	5.30275E-07	6.30807E-06	NA
ENSMUSG000000049719	8.961851482	4.866467559	0.971825876	5.007550922	5.5127E-07	6.54471E-06	Prss46
ENSMUSG000000011751	98.82257977	2.932638802	0.585777901	5.006400542	5.54573E-07	6.58064E-06	Sptbn4
ENSMUSG000000019433	1518.14573	1.073716023	0.21450167	5.005630125	5.56796E-07	6.60372E-06	Gipc1
ENSMUSG000000035390	173.8374938	1.44357914	0.288827204	4.998071919	5.79064E-07	6.8439E-06	Brsk1
ENSMUSG000000020834	157.8610932	1.352013374	0.270702468	4.994462682	5.89998E-07	6.9662E-06	Dhrs13
ENSMUSG000000023966	179.0800688	2.759659745	0.552746582	4.992631043	5.95623E-07	7.02912E-06	Rsph9
ENSMUSG000000015468	487.1637523	1.247722925	0.250011558	4.990660982	6.0173E-07	7.09767E-06	Notch4
ENSMUSG000000029372	66.89733282	2.878546419	0.577224124	4.986878235	6.13627E-07	7.22365E-06	Ppbp
ENSMUSG000000032796	334.7895325	2.44174658	0.489913003	4.984041173	6.22698E-07	7.32318E-06	Lama1
ENSMUSG000000047721	882.5579801	1.037360267	0.208215044	4.982158095	6.2879E-07	7.39116E-06	Bola2
ENSMUSG000000070697	1067.410466	0.785144419	0.15763358	4.980819562	6.33156E-07	7.43302E-06	Utp3

ENSMUSG00000029587	404.6195174	1.233033626	0.247640726	4.979122963	6.38731E-07	7.49318E-06	Zfp12
ENSMUSG00000055633	119.5502576	1.363443717	0.273883152	4.978194933	6.418E-07	7.52529E-06	Zfp580
ENSMUSG00000034774	8.441552724	4.445986095	0.893340818	4.976808408	6.46412E-07	7.57208E-06	Dsg1c
ENSMUSG00000055762	3891.775555	1.023203346	0.205614319	4.976323399	6.48033E-07	7.58733E-06	Eef1d
ENSMUSG00000068748	106.8252502	1.719855729	0.345740702	4.9744092	6.54469E-07	7.65513E-06	Ptprz1
ENSMUSG00000060429	120.4586973	1.456302477	0.292828995	4.973218167	6.58505E-07	7.69476E-06	Sntb1
ENSMUSG00000030729	473.8666671	1.287748029	0.259219169	4.967796295	6.7718E-07	7.90461E-06	Pgm211
ENSMUSG00000051067	48.29621278	3.601752497	0.725031943	4.967715604	6.77462E-07	7.90461E-06	Lingo3
ENSMUSG00000009418	827.7582901	1.245899573	0.250850982	4.966692031	6.81046E-07	7.93863E-06	Nav1
ENSMUSG00000022193	1481.225182	1.149835781	0.231538425	4.966068951	6.83237E-07	7.96026E-06	Psmb5
ENSMUSG00000032718	901.639951	1.623250346	0.326946343	4.964883014	6.87425E-07	8.00513E-06	Mansc1
ENSMUSG00000028653	398.8122693	1.344700994	0.270955882	4.96280422	6.94826E-07	8.08339E-06	Trit1
ENSMUSG00000039089	406.3363392	0.839059384	0.169131089	4.961000295	7.01311E-07	8.15484E-06	L3mbtl3
ENSMUSG00000042918	78.32963492	2.288066027	0.461470849	4.958202736	7.11483E-07	8.26908E-06	Mamstr
ENSMUSG00000041523	10.46350584	3.908597861	0.788394069	4.957670302	7.13435E-07	8.28366E-06	Upk2
ENSMUSG00000004393	1198.597706	0.913360419	0.184255525	4.957031382	7.15784E-07	8.30282E-06	Ddx56
ENSMUSG00000063765	79.24639023	2.685881532	0.541983494	4.955651899	7.20882E-07	8.35473E-06	Chadl
ENSMUSG00000110357	47.82868707	2.207135874	0.445379474	4.955629983	7.20963E-07	8.35473E-06	A030001D20Rik
ENSMUSG00000031226	730.0455657	1.187127473	0.239573249	4.955175415	7.22651E-07	8.3702E-06	Pbdc1
ENSMUSG00000054836	225.8269437	1.372596822	0.277167539	4.952227905	7.33686E-07	8.48561E-06	Elp6
ENSMUSG00000060227	668.9875947	1.775782063	0.358664986	4.951088433	7.37996E-07	8.52715E-06	Casc4
ENSMUSG00000056569	26.74663846	3.378514296	0.682783842	4.948146233	7.49236E-07	8.64442E-06	Mpz
ENSMUSG00000054793	350.1948217	2.247925706	0.45449713	4.945962374	7.57686E-07	8.73342E-06	Cadm4
ENSMUSG00000000182	35.60057758	4.556594772	0.921317678	4.945736829	7.58564E-07	8.7393E-06	Fgf23
ENSMUSG00000004100	1053.027749	1.063395516	0.21506317	4.944572868	7.6311E-07	8.77576E-06	Ppan
ENSMUSG00000005413	1284.344724	2.754828104	0.557134775	4.944634993	7.62867E-07	8.77576E-06	Hmox1
ENSMUSG00000022346	1100.352966	1.720890875	0.348018938	4.944819622	7.62144E-07	8.77576E-06	Myc
ENSMUSG00000025894	597.4603842	1.121744138	0.226891111	4.943975685	7.65453E-07	8.79733E-06	Aasdhppt
ENSMUSG00000027860	412.3841674	1.632272942	0.330258021	4.942417253	7.71599E-07	8.86368E-06	Vangl1
ENSMUSG00000031503	9014.395185	2.250541456	0.45541219	4.941768148	7.74172E-07	8.88895E-06	Col4a2
ENSMUSG00000044320	96.23637713	2.125932307	0.430205023	4.94167244	7.74553E-07	8.88902E-06	1700001O22Rik
ENSMUSG000000031502	11435.0487	2.301259779	0.465726152	4.941229456	7.76315E-07	8.90064E-06	Col4a1
ENSMUSG00000047497	91.89544546	3.194031236	0.647008285	4.936615666	7.94899E-07	9.10932E-06	Adamts12
ENSMUSG00000026725	111.2807274	4.030409671	0.816531522	4.936012345	7.97361E-07	9.13312E-06	Tnn
ENSMUSG00000030116	448.3650309	3.373277466	0.684076367	4.93114165	8.17504E-07	9.34583E-06	Mfap5
ENSMUSG00000031112	208.5586156	1.802445844	0.365652525	4.929395319	8.24845E-07	9.42068E-06	Stk26
ENSMUSG00000023944	40638.39246	1.193193761	0.242095505	4.928607668	8.28177E-07	9.44965E-06	Hsp90ab1
ENSMUSG00000109973	10.47654621	4.184491452	0.849135799	4.927941393	8.31005E-07	9.47737E-06	NA
ENSMUSG00000029446	501.8219339	1.308680973	0.265602454	4.927217168	8.3409E-07	9.50799E-06	Psph
ENSMUSG00000063439	208.3653529	1.289937916	0.261804406	4.927105453	8.34567E-07	9.50886E-06	B9d2
ENSMUSG00000033751	892.5563016	1.302412888	0.264383635	4.926223555	8.38341E-07	9.54024E-06	Gadd45gip1
ENSMUSG00000038425	158.4558355	1.535716282	0.311783389	4.925587241	8.41074E-07	9.56465E-06	Poli
ENSMUSG00000021477	7108.179678	2.069391441	0.4204378	4.921991882	8.56678E-07	9.72348E-06	Ctsl
ENSMUSG00000035799	74.12611261	1.326654955	0.269578316	4.92122279	8.60052E-07	9.75711E-06	Twist1
ENSMUSG00000031351	104.6117007	1.753832526	0.356479373	4.919870987	8.66013E-07	9.81536E-06	Zfp185
ENSMUSG00000024232	252.3406256	2.089721817	0.424828272	4.918980103	8.69963E-07	9.85074E-06	Bambi
ENSMUSG00000035062	72.78172079	1.383006716	0.281276337	4.916896788	8.79269E-07	9.95136E-06	Zc4h2
ENSMUSG00000002477	1260.523754	1.762629336	0.358698184	4.913962251	8.92539E-07	1.00919E-05	Snrpd1
ENSMUSG00000039985	882.1716541	1.599576459	0.32557644	4.913059614	8.9666E-07	1.01337E-05	NA
ENSMUSG00000042712	2914.804175	1.317494366	0.268534024	4.906247434	9.28354E-07	1.04422E-05	Wbp5
ENSMUSG00000048807	332.0535283	1.733986087	0.353552737	4.904462356	9.36836E-07	1.05277E-05	Slc35e4
ENSMUSG00000028184	893.6873476	1.343574428	0.273968859	4.904113673	9.38501E-07	1.05414E-05	Adgrl2
ENSMUSG00000040219	110.6474696	1.693794172	0.34554804	4.901761769	9.4981E-07	1.06583E-05	Ttc12
ENSMUSG00000020808	165.0746541	2.383628885	0.487059971	4.89391251	9.88508E-07	1.10612E-05	Fam64a
ENSMUSG00000016534	7734.932953	0.770344364	0.157542572	4.889753643	1.00962E-06	1.12763E-05	Lamp2
ENSMUSG00000003617	4108.289413	2.587548984	0.529279054	4.888818034	1.01443E-06	1.13246E-05	Cp
ENSMUSG00000023330	163.4068296	1.018176644	0.208286383	4.888349536	1.01685E-06	1.1344E-05	Dtwd1
ENSMUSG000000022156	15.95310948	5.043455672	1.032180209	4.886216215	1.02792E-06	1.14537E-05	Gzme
ENSMUSG00000020142	1104.465314	1.909210324	0.391136211	4.881190415	1.05447E-06	1.17276E-05	Slc1a4
ENSMUSG00000033022	1476.01261	2.549482181	0.522556738	4.878861938	1.067E-06	1.18557E-05	Cdo1
ENSMUSG00000029869	148.5608586	1.799334777	0.368957264	4.876810814	1.07815E-06	1.19573E-05	Ephb6
ENSMUSG00000051557	271.135239	0.868467908	0.178096265	4.876395965	1.08042E-06	1.19768E-05	Pusl1
ENSMUSG00000022863	93.42972709	1.807752226	0.370763528	4.875755273	1.08393E-06	1.20102E-05	Btg3
ENSMUSG00000104036	25.92673908	1.857276639	0.381115837	4.873260202	1.09771E-06	1.2129E-05	NA
ENSMUSG00000040891	1194.472883	2.297172686	0.471418275	4.872896974	1.09974E-06	1.214E-05	Foxa3
ENSMUSG00000014504	847.5525067	1.002418316	0.205886506	4.868790757	1.12283E-06	1.23892E-05	Srp19
ENSMUSG00000007783	212.3770125	1.708760179	0.351152466	4.866148882	1.13794E-06	1.25442E-05	Cpt1c

ENSMUSG00000035539	21.08599042	2.397584788	0.492806959	4.865160169	1.14364E-06	1.25954E-05	Ccdc180
ENSMUSG00000030413	16489.70386	2.856117856	0.587311561	4.863037008	1.15598E-06	1.27196E-05	Pglyrp1
ENSMUSG00000063632	83.86119819	3.386221388	0.696399278	4.862471136	1.15929E-06	1.27501E-05	Sox11
ENSMUSG00000025938	56.35016584	2.831950707	0.582885473	4.858502811	1.18277E-06	1.29842E-05	Slco5a1
ENSMUSG00000001946	682.780645	0.880960511	0.181347725	4.857852559	1.18666E-06	1.30209E-05	Esam
ENSMUSG00000049047	532.1297897	1.697234411	0.349558018	4.855372561	1.20161E-06	1.31606E-05	Armxc3
ENSMUSG00000078816	77.82741342	1.714162554	0.353210881	4.853085351	1.21555E-06	1.3295E-05	Prkcg
ENSMUSG00000042212	14.40239761	3.739862362	0.770877926	4.851432679	1.22573E-06	1.33878E-05	Sprr2d
ENSMUSG00000054766	4079.992419	1.104114891	0.227612122	4.850861555	1.22926E-06	1.3414E-05	Set
ENSMUSG00000039007	1480.49512	1.13925	0.234888025	4.850183411	1.23347E-06	1.34538E-05	Cpq
ENSMUSG00000030315	955.2315873	1.40448743	0.289623269	4.849359774	1.23861E-06	1.35036E-05	Vgll4
ENSMUSG00000048234	1574.967167	1.659437947	0.342423103	4.846162345	1.25873E-06	1.37041E-05	Rnf149
ENSMUSG00000002105	454.0645417	1.373268112	0.28339604	4.845756179	1.2613E-06	1.37258E-05	Slc39a13
ENSMUSG00000017667	140.6679366	2.001267458	0.413112218	4.844367636	1.27016E-06	1.38095E-05	Zfp334
ENSMUSG00000016637	426.6406233	1.210244538	0.249924911	4.842432603	1.28259E-06	1.3932E-05	Ift27
ENSMUSG00000079442	331.3750657	1.758631371	0.363194591	4.842118841	1.28462E-06	1.39476E-05	St6galnac4
ENSMUSG00000082593	16.97105839	2.761777947	0.570725919	4.839061718	1.30454E-06	1.41509E-05	NA
ENSMUSG00000061024	784.9120406	1.309514749	0.270931383	4.833381555	1.34233E-06	1.45278E-05	Rrs1
ENSMUSG00000048988	65.18083973	3.299564746	0.682736399	4.832853134	1.3459E-06	1.45531E-05	Elfn1
ENSMUSG00000038415	756.7215952	2.032705833	0.420669891	4.832068742	1.35122E-06	1.45973E-05	Foxq1
ENSMUSG00000022842	273.4365288	1.347520413	0.278932258	4.83099525	1.35852E-06	1.46629E-05	Ece2
ENSMUSG00000030111	302.4070054	3.782755838	0.784161368	4.823950773	1.40742E-06	1.51631E-05	A2m
ENSMUSG00000055717	209.1087342	1.178394703	0.244276079	4.824028234	1.40687E-06	1.51631E-05	Slain1
ENSMUSG00000038812	699.2995161	1.193022096	0.247327757	4.823648223	1.40956E-06	1.51793E-05	Trmt112
ENSMUSG00000085139	54.15435713	2.323514702	0.481733509	4.823236621	1.41247E-06	1.52038E-05	A730046J19Rik
ENSMUSG00000052861	11.13553872	2.952221736	0.612236985	4.822024492	1.42108E-06	1.52836E-05	Dnah6
ENSMUSG00000016524	98.59337172	4.88907827	1.015001681	4.816817903	1.45866E-06	1.56512E-05	Il19
ENSMUSG00000039824	44.87261949	2.217706285	0.460723828	4.813526344	1.4829E-06	1.58684E-05	Myl6b
ENSMUSG00000047641	99.67375442	3.089276919	0.641876702	4.812882146	1.48769E-06	1.59069E-05	Krt87
ENSMUSG00000039676	69.12542447	2.645999711	0.549910732	4.811689532	1.4966E-06	1.59861E-05	Capsl
ENSMUSG000000110730	7.427262082	4.30588592	0.895154575	4.810214952	1.50768E-06	1.60973E-05	NA
ENSMUSG000000033454	579.5726953	1.640253263	0.133131036	4.809196122	1.51538E-06	1.61723E-05	Zbtb1
ENSMUSG00000062995	633.3520558	1.562488341	0.32492856	4.808713462	1.51905E-06	1.62041E-05	Ica1
ENSMUSG00000033152	158.4580091	1.639625402	0.341153285	4.806125206	1.53884E-06	1.64004E-05	Podxl2
ENSMUSG000000105039	5.775364151	4.51782609	0.940299502	4.804667107	1.55009E-06	1.65056E-05	NA
ENSMUSG00000030029	3732.031878	1.468331637	0.30566412	4.803742214	1.55727E-06	1.65746E-05	Lrig1
ENSMUSG00000025902	367.3883705	2.838380529	0.5911699	4.801294062	1.57644E-06	1.67561E-05	Sox17
ENSMUSG00000024170	401.0161137	0.926952912	0.193148745	4.799166109	1.59328E-06	1.69199E-05	Telo2
ENSMUSG00000015702	65.66821323	1.12403769	0.234263283	4.79818124	1.60113E-06	1.69881E-05	Anxa9
ENSMUSG00000024579	236.4635096	2.449898289	0.510633862	4.797759157	1.60451E-06	1.70151E-05	Pcyox1l
ENSMUSG00000027387	123.1679779	1.096397865	0.228526443	4.797684899	1.6051E-06	1.70151E-05	Zc3h8
ENSMUSG00000038539	1352.850585	1.569417703	0.32747013	4.792552229	1.64673E-06	1.73943E-05	Atf5
ENSMUSG00000022476	337.3753214	1.241770942	0.259109454	4.792457098	1.64751E-06	1.73948E-05	Polr3h
ENSMUSG00000084938	12.04859108	3.101048993	0.647623204	4.788353746	1.68155E-06	1.77305E-05	BB557941
ENSMUSG00000004473	126.2142412	1.856756485	0.387802718	4.787889308	1.68545E-06	1.77637E-05	Clec11a
ENSMUSG00000037493	236.5080193	1.772480192	0.370283713	4.786816512	1.69448E-06	1.78345E-05	Cib2
ENSMUSG00000087624	35.47859347	2.066454886	0.431704421	4.786735526	1.69516E-06	1.78345E-05	NA
ENSMUSG000000101892	215.0901248	1.42921192	0.298568228	4.786885494	1.69389E-06	1.78345E-05	9130401M01Rik
ENSMUSG00000023000	26.51109025	2.211033392	0.462501009	4.780602309	1.74771E-06	1.83467E-05	Dhh
ENSMUSG00000019303	109.7830023	2.129338741	0.445459057	4.780099778	1.75208E-06	1.83845E-05	Psmc3ip
ENSMUSG00000027333	2114.336409	1.802255679	0.37733942	4.776218929	1.78622E-06	1.86849E-05	Smox
ENSMUSG00000029781	1733.603742	1.628977112	0.341366404	4.771931544	1.82468E-06	1.90704E-05	Fkbp9
ENSMUSG00000024087	1752.338786	2.510189817	0.526316627	4.76935306	1.84818E-06	1.92991E-05	Cyp1b1
ENSMUSG00000031734	60.7106385	2.803222547	0.587789589	4.769091866	1.85058E-06	1.93157E-05	Irx3
ENSMUSG00000020973	297.8298072	1.21941699	0.255703395	4.768872889	1.8526E-06	1.93282E-05	Dnaaf2
ENSMUSG00000024352	139.9716384	2.056277482	0.431446713	4.766005676	1.87914E-06	1.95965E-05	Spata24
ENSMUSG00000038545	641.2080665	1.448553227	0.304310305	4.760118876	1.93479E-06	2.01238E-05	Cul7
ENSMUSG00000039728	30.03157591	3.394041596	0.713463229	4.75713598	1.96359E-06	2.03877E-05	Slc6a5
ENSMUSG00000038279	1179.297779	0.916054676	0.192576023	4.756846986	1.9664E-06	2.0408E-05	Nop2
ENSMUSG00000056076	7293.128064	1.019964368	0.214447533	4.756242016	1.9723E-06	2.04602E-05	Eif3b
ENSMUSG00000038633	1879.066276	1.119720459	0.235438003	4.755903662	1.97561E-06	2.04677E-05	Degs1
ENSMUSG00000066108	11.58282447	4.859467571	1.021758702	4.755983542	1.97483E-06	2.04677E-05	Muc5b
ENSMUSG00000041840	286.3789	1.490605966	0.313438302	4.755659908	1.97799E-06	2.04835E-05	Haus1
ENSMUSG00000051469	984.2677582	0.781546121	0.164363205	4.754994407	1.98452E-06	2.05422E-05	Zfp24
ENSMUSG00000028186	50.59421216	1.897312716	0.399065552	4.754388614	1.99048E-06	2.05949E-05	Uox
ENSMUSG00000073771	189.0084675	1.430779678	0.301527823	4.74510002	2.08403E-06	2.15253E-05	NA
ENSMUSG00000022582	101.0130555	2.663849912	0.561605929	4.743272418	2.10293E-06	2.17017E-05	Ly6g



ENSMUSG00000025939	592.872386	0.764057785	0.161109924	4.742462577	2.11136E-06	2.17697E-05	Ube2w
ENSMUSG00000031562	230.9539369	1.80554553	0.380816679	4.741245931	2.12408E-06	2.18819E-05	Dctd
ENSMUSG00000001039	138.6265738	2.291178607	0.483397239	4.739742853	2.1399E-06	2.20067E-05	B9d1
ENSMUSG00000048040	63.31779161	2.25677495	0.476247312	4.738661816	2.15134E-06	2.21052E-05	Arxes2
ENSMUSG00000021464	447.7917149	0.961909517	0.203005035	4.738352988	2.15462E-06	2.21294E-05	Ror2
ENSMUSG00000047904	24.09029139	1.82438092	0.385122834	4.737140362	2.16755E-06	2.22525E-05	Sstr2
ENSMUSG00000032353	2675.064642	1.181790164	0.249495499	4.736719369	2.17206E-06	2.22858E-05	Tmed3
ENSMUSG00000086253	5.661413454	4.483509465	0.94655465	4.736662025	2.17267E-06	2.22858E-05	NA
ENSMUSG00000025156	1681.186335	1.171067348	0.247386201	4.7337618	2.20396E-06	2.2597E-05	Gps1
ENSMUSG00000016552	160.9732105	2.306012764	0.487167765	4.733508514	2.20672E-06	2.26155E-05	Foxred2
ENSMUSG00000032178	1175.552688	0.754538845	0.159483887	4.731129027	2.23275E-06	2.28724E-05	Ilf3
ENSMUSG00000011148	228.7527446	2.592968236	0.548095366	4.730870573	2.23559E-06	2.28917E-05	Adssl1
ENSMUSG00000028763	3455.101127	1.615272968	0.341496675	4.729981532	2.2454E-06	2.29723E-05	Hspg2
ENSMUSG00000032591	29.26985583	2.387662429	0.504816817	4.729760083	2.24785E-06	2.29875E-05	Mst1
ENSMUSG00000110218	213.8289459	2.16696475	0.458221412	4.729077895	2.25542E-06	2.3055E-05	Gm20219
ENSMUSG00000034317	392.1420158	1.446556652	0.305904238	4.728789189	2.25863E-06	2.30778E-05	Trim59
ENSMUSG00000030284	552.3449465	1.890412786	0.399823218	4.728121576	2.26606E-06	2.31439E-05	Credl1
ENSMUSG00000031722	12137.44926	3.220889594	0.682055399	4.722328422	2.3316E-06	2.37825E-05	Hp
ENSMUSG00000084910	182.1134473	1.943324783	0.411517972	4.722332715	2.33155E-06	2.37825E-05	NA
ENSMUSG00000044576	34.51846668	3.441675292	0.728877425	4.721884877	2.33669E-06	2.38242E-05	Garem2
ENSMUSG00000029661	15756.58272	2.898324176	0.613901564	4.721154575	2.3451E-06	2.38792E-05	Col1a2
ENSMUSG00000013415	25.56382959	3.286752663	0.696450121	4.719293692	2.36665E-06	2.40817E-05	Igf2bp1
ENSMUSG00000028597	184.5487173	2.057608722	0.436031696	4.718943004	2.37073E-06	2.41092E-05	Gpx7
ENSMUSG00000040280	109.9383676	2.012636299	0.426539903	4.718518214	2.37569E-06	2.41493E-05	Ndufa4l2
ENSMUSG00000005054	1804.120049	1.177606492	0.249609489	4.717795365	2.38414E-06	2.42145E-05	Cstb
ENSMUSG00000040688	1009.377142	0.903379552	0.191546815	4.716233737	2.4025E-06	2.43906E-05	Tbl3
ENSMUSG00000053553	278.2396002	1.337745164	0.283770949	4.714172356	2.42695E-06	2.46072E-05	3110082117Rik
ENSMUSG00000037405	1211.266029	1.701657353	0.361070365	4.712813678	2.4432E-06	2.47508E-05	Icam1
ENSMUSG00000031910	21.72227998	2.526907594	0.536246012	4.712217039	2.45036E-06	2.48128E-05	Has3
ENSMUSG00000070564	17.08402008	2.957778076	0.627714445	4.711980264	2.45321E-06	2.48311E-05	Ntn5
ENSMUSG00000035104	186.1112912	1.864013904	0.395660832	4.711140836	2.46334E-06	2.4923E-05	Eva1a
ENSMUSG00000038508	158.2458832	3.068043946	0.651453734	4.70953467	2.48283E-06	2.50988E-05	Gdf15
ENSMUSG00000055491	1034.282384	1.210142796	0.257027708	4.708219218	2.4989E-06	2.5229E-05	Pprc1
ENSMUSG00000079317	174.1252652	0.943507503	0.200394458	4.70825149	2.49851E-06	2.5229E-05	Trappc2
ENSMUSG00000024925	590.8228359	1.601523287	0.34019596	4.707649341	2.5059E-06	2.52889E-05	Rnaseh2c
ENSMUSG00000085569	7.663857809	4.638097888	0.98531758	4.70721114	2.51129E-06	2.53325E-05	NA
ENSMUSG00000026748	279.9236818	2.137884919	0.454198356	4.706941118	2.51462E-06	2.53535E-05	Plxdc2
ENSMUSG00000066755	8.604864797	3.375273898	0.717297567	4.705542099	2.53192E-06	2.5519E-05	Tnfsf18
ENSMUSG00000098053	9.160397778	4.334685088	0.921647228	4.703193321	2.56124E-06	2.57926E-05	NA
ENSMUSG00000010663	1883.4902	1.377586857	0.292925773	4.702853017	2.56551E-06	2.58148E-05	Fads1
ENSMUSG00000020303	470.7018882	2.190481737	0.466036161	4.700239855	2.59856E-06	2.61021E-05	Stc2
ENSMUSG00000075224	59.42168476	2.378491826	0.506081757	4.699817362	2.60394E-06	2.61451E-05	Lrrc55
ENSMUSG00000056155	12.77665779	2.81376901	0.598852302	4.698602647	2.61948E-06	2.62899E-05	Nanos3
ENSMUSG00000037411	1610.717933	3.109297101	0.662152642	4.695740683	2.65642E-06	2.66382E-05	Serpine1
ENSMUSG00000111528	10.80805158	4.122317715	0.880490538	4.681842152	2.84308E-06	2.84261E-05	NA
ENSMUSG00000063971	18.13938415	2.522999646	0.539154022	4.679552673	2.87501E-06	2.87091E-05	Krt88
ENSMUSG00000028356	46.91177631	2.443007981	0.522127477	4.678949276	2.88349E-06	2.87788E-05	Ambp
ENSMUSG00000030170	147.9357228	2.026941037	0.433210488	4.678882651	2.88442E-06	2.87788E-05	Wnt5b
ENSMUSG00000032840	465.9639091	1.044833248	0.223319219	4.678653518	2.88765E-06	2.87989E-05	2410131K14Rik
ENSMUSG00000063531	81.68800283	1.838549897	0.393010709	4.678116537	2.89522E-06	2.88381E-05	Sema3e
ENSMUSG00000002980	1688.741876	1.840029694	0.393435586	4.676825789	2.9135E-06	2.89958E-05	Bcam
ENSMUSG00000039109	1639.259448	2.511126558	0.537139252	4.675001036	2.93952E-06	2.92059E-05	F13a1
ENSMUSG00000035551	44.23365055	3.446756155	0.738062388	4.670006505	3.0119E-06	2.98004E-05	Igfbp1
ENSMUSG00000020650	709.843453	1.400601246	0.299975981	4.669044642	3.02604E-06	2.99153E-05	Bcap29
ENSMUSG00000021913	189.6522359	2.326012886	0.498542037	4.665630404	3.07672E-06	3.03533E-05	Ogdhl
ENSMUSG00000024512	11.21011175	3.861734417	0.82818729	4.662875732	3.11821E-06	3.07448E-05	Dynap
ENSMUSG00000060261	3159.688389	1.358104864	0.291349335	4.661431147	3.14018E-06	3.09279E-05	Gtf2i
ENSMUSG00000066456	191.4108738	1.557005932	0.334044473	4.66107377	3.14564E-06	3.09688E-05	Hmgn3
ENSMUSG00000057421	1281.936222	0.703735111	0.15100904	4.660218439	3.15874E-06	3.10721E-05	Las1l
ENSMUSG00000043458	30.67653068	1.859685759	0.399208981	4.658426651	3.18635E-06	3.13177E-05	Pcdhb12
ENSMUSG00000009097	242.9528185	3.418667586	0.734073436	4.657119327	3.20665E-06	3.14911E-05	Tbx1
ENSMUSG000000023043	23386.21105	1.585801184	0.340509301	4.657144983	3.20625E-06	3.14911E-05	Krt18
ENSMUSG00000004996	829.0446403	1.324910603	0.284588832	4.655525635	3.23155E-06	3.17095E-05	Mri1
ENSMUSG00000046259	28.7556333	3.013187053	0.647655509	4.652453365	3.28009E-06	3.21327E-05	Sprrr2h
ENSMUSG00000002274	222.1360863	1.445801565	0.311073533	4.6477807	3.35525E-06	3.27744E-05	Metrrn
ENSMUSG00000050201	204.9386915	3.42880291	0.737796201	4.647357777	3.36214E-06	3.28282E-05	Otop2
ENSMUSG000000028195	1179.738985	1.960350014	0.422726966	4.637390499	3.52835E-06	3.42961E-05	Cyr61



ENSMUSG00000034677	8.918935978	3.960452559	0.854344655	4.635661421	3.55798E-06	3.45416E-05	Gpr142
ENSMUSG00000061758	242.5616133	1.078870595	0.232821677	4.633892389	3.58854E-06	3.47956E-05	Akr1b10
ENSMUSG00000037013	1617.582077	0.949616598	0.205027506	4.631654626	3.62755E-06	3.51452E-05	Ss18
ENSMUSG00000062352	421.1787722	1.062118245	0.229434206	4.629293352	3.66916E-06	3.55049E-05	Itgb1bp1
ENSMUSG00000051736	42.44247872	1.537936418	0.332854192	4.620450798	3.82907E-06	3.6977E-05	Fam229b
ENSMUSG00000035215	192.7983717	1.375954002	0.297859645	4.619471035	3.8472E-06	3.71318E-05	Lsm7
ENSMUSG00000024039	318.4881911	1.976490109	0.427874694	4.619319944	3.85E-06	3.71338E-05	Cbs
ENSMUSG00000032959	6107.219631	1.323758887	0.286656593	4.617925834	3.87595E-06	3.73386E-05	Pebp1
ENSMUSG00000033767	840.7952617	1.379414202	0.298719669	4.617754862	3.87914E-06	3.73542E-05	D930015E06Rik
ENSMUSG00000046157	671.7456614	1.906477322	0.412942583	4.616809702	3.89684E-06	3.74791E-05	Tmem229b
ENSMUSG00000026837	3852.300446	2.665427832	0.577410081	4.616178206	3.90871E-06	3.75629E-05	Col5a1
ENSMUSG00000041193	350.6341396	1.858695419	0.402797113	4.614470561	3.94099E-06	3.78577E-05	Pla2g5
ENSMUSG00000020884	29.95263438	3.000557051	0.650412513	4.613313844	3.96299E-06	3.79923E-05	Asgr1
ENSMUSG00000031360	742.3464161	1.065626608	0.231080389	4.611497377	3.99779E-06	3.82641E-05	Ctps2
ENSMUSG00000002660	1150.320374	0.84809517	0.183914812	4.611347829	4.00066E-06	3.82762E-05	Clpp
ENSMUSG00000039286	1489.692971	1.282845103	0.278245076	4.610486269	4.01728E-06	3.84159E-05	Fndc3b
ENSMUSG00000057454	35.47734012	2.871798323	0.622892566	4.610423178	4.0185E-06	3.84159E-05	Lypd3
ENSMUSG00000024516	3345.37421	1.554642363	0.337336638	4.608578462	4.05431E-06	3.87271E-05	Sec11c
ENSMUSG00000030323	231.3748254	1.178968758	0.255929835	4.606609299	4.09288E-06	3.90484E-05	Ift122
ENSMUSG00000039982	1253.123547	1.244088201	0.270139514	4.605354399	4.11764E-06	3.92688E-05	Dtx4
ENSMUSG00000027996	193.1432142	3.015461107	0.654900579	4.604456315	4.13545E-06	3.93912E-05	Sfrp2
ENSMUSG000000022111	679.6883605	1.244369234	0.2702698	4.604174174	4.14106E-06	3.94288E-05	Uchl3
ENSMUSG00000001227	428.7568395	1.213187605	0.263532722	4.603555858	4.15338E-06	3.94987E-05	Sema6b
ENSMUSG00000040463	3720.255025	1.214588773	0.263848067	4.603364305	4.1572E-06	3.95192E-05	Mybbp1a
ENSMUSG00000046589	131.8015072	1.746856644	0.379529572	4.602689148	4.1707E-06	3.96317E-05	Lrrc8e
ENSMUSG00000086427	8.773184202	4.323522567	0.939432087	4.602272614	4.17906E-06	3.96952E-05	Hoxa11os
ENSMUSG00000087380	31.69549095	1.675600543	0.364101423	4.602015916	4.18421E-06	3.97283E-05	2210408F21Rik
ENSMUSG00000032431	820.7720772	1.944974196	0.42268587	4.601464905	4.1953E-06	3.98176E-05	Crtap
ENSMUSG00000024409	23.41849765	3.374930584	0.733526562	4.600965742	4.20537E-06	3.98972E-05	Psors1c2
ENSMUSG00000041351	2023.180681	1.745704397	0.379565902	4.59921291	4.2409E-06	4.01862E-05	Rap1gap
ENSMUSG00000029371	540.8748052	3.565633785	0.775536628	4.597634278	4.27315E-06	4.04434E-05	Cxcl5
ENSMUSG000000001504	27.91370816	3.445497953	0.75007238	4.59355396	4.3576E-06	4.11935E-05	Irx2
ENSMUSG00000061068	31.19991315	3.156018668	0.68740277	4.59122192	4.40658E-06	4.16068E-05	Mcpt4
ENSMUSG00000006782	1561.508004	1.903677057	0.414822861	4.589132457	4.45092E-06	4.19587E-05	Cnp
ENSMUSG00000021003	291.2686817	0.860632064	0.187554445	4.588705224	4.46004E-06	4.2028E-05	Galc
ENSMUSG00000019878	204.9501439	0.981594952	0.213939267	4.588194421	4.47096E-06	4.21143E-05	Hsf2
ENSMUSG00000033629	1910.963879	0.845822787	0.184389351	4.587156363	4.49324E-06	4.22906E-05	Hacd3
ENSMUSG00000027551	618.3260734	1.202250044	0.262141169	4.586269489	4.51236E-06	4.24537E-05	Zfp64
ENSMUSG00000097045	15.39072672	2.18694918	0.477103968	4.583800023	4.56601E-06	4.29075E-05	Gm26641
ENSMUSG00000002489	540.6518937	1.51610524	0.330852467	4.582420836	4.59624E-06	4.31233E-05	Tiam1
ENSMUSG00000032892	438.3078416	1.508670538	0.329464703	4.579156808	4.66854E-06	4.37326E-05	Rangrf
ENSMUSG000000059248	3339.623181	0.720848256	0.157418852	4.579173643	4.66817E-06	4.37326E-05	Sept9
ENSMUSG00000033752	80.02982854	1.69580246	0.370474543	4.577379181	4.70838E-06	4.4071E-05	Mnd1
ENSMUSG00000028681	58.21273916	2.247884702	0.49122285	4.576099632	4.73725E-06	4.43063E-05	Ptch2
ENSMUSG00000100058	22.11672087	4.255278887	0.930087528	4.575138103	4.75906E-06	4.44928E-05	Scgb2b18
ENSMUSG00000016918	618.0954025	1.689967702	0.369582517	4.572639739	4.81618E-06	4.4956E-05	Sulf1
ENSMUSG00000025857	444.0787998	0.880981354	0.192811793	4.569125889	4.89763E-06	4.56088E-05	Dnaaf5
ENSMUSG00000097243	25.21939054	1.593414784	0.349370472	4.560816985	5.0955E-06	4.73586E-05	NA
ENSMUSG000000021763	30.56211423	1.995585049	0.437591212	4.560386482	5.10596E-06	4.74373E-05	BC067074
ENSMUSG00000031149	333.9220218	1.092931797	0.239693769	4.559700501	5.12266E-06	4.75553E-05	Praf2
ENSMUSG00000007122	36.55480469	2.250785508	0.493695574	4.559055476	5.13842E-06	4.76643E-05	Casq1
ENSMUSG00000034848	217.7219399	1.701386731	0.373500234	4.555249435	5.23235E-06	4.84977E-05	Ttc21b
ENSMUSG00000071719	50.39838391	2.363035673	0.51888867	4.554032123	5.26273E-06	4.86844E-05	Tmem28
ENSMUSG00000027122	432.8041855	1.121123317	0.246187546	4.553940014	5.26504E-06	4.86867E-05	Arl14ep
ENSMUSG00000052373	285.3981637	1.538212425	0.338066083	4.550034746	5.36371E-06	4.95413E-05	Mpp3
ENSMUSG00000064037	601.1590506	1.077296636	0.236849144	4.548450629	5.40423E-06	4.98768E-05	Gpn1
ENSMUSG00000039179	28.57336515	2.587108962	0.568811217	4.54827346	5.40878E-06	4.98994E-05	Tekt5
ENSMUSG00000049939	49.10742053	1.850919735	0.406983677	4.547896734	5.41847E-06	4.99694E-05	Lrrc4
ENSMUSG00000029480	505.7086105	1.016893608	0.223613821	4.547543625	5.42757E-06	5.00143E-05	Dhx37
ENSMUSG00000039018	323.0326168	0.869239857	0.191439308	4.540550565	5.61075E-06	5.15625E-05	Mtg1
ENSMUSG00000045362	135.6733256	2.618329566	0.577113612	4.536939537	5.70765E-06	5.23921E-05	Tnfrsf26
ENSMUSG00000062590	190.327238	1.022279553	0.225346253	4.536483482	5.72E-06	5.24852E-05	Arm9
ENSMUSG00000071047	5.740266678	4.398747088	0.970330968	4.533244052	5.80846E-06	5.32764E-05	Ces1a
ENSMUSG00000109857	10.76335727	2.605037959	0.574697741	4.532883588	5.81839E-06	5.33468E-05	NA
ENSMUSG00000000627	62.67682183	2.031052061	0.448303373	4.530530403	5.88358E-06	5.39237E-05	Sema4f
ENSMUSG00000026933	512.9298696	0.912166538	0.201353719	4.530169804	5.89363E-06	5.39742E-05	Camsap1
ENSMUSG00000061046	701.2517543	1.386915178	0.306292417	4.52807547	5.95233E-06	5.44698E-05	Haghl

ENSMUSG00000029551	374.7298104	1.286899975	0.284464826	4.523933567	6.07008E-06	5.54618E-05	Psmg3
ENSMUSG000000107728	258.1005608	1.744457485	0.385653336	4.523382326	6.08592E-06	5.55638E-05	NA
ENSMUSG00000024220	565.4494488	0.694171275	0.153499733	4.522296309	6.11723E-06	5.57854E-05	Zfp523
ENSMUSG00000013091	7.608715932	4.214303938	0.932035128	4.521614917	6.13696E-06	5.59439E-05	Tmem190
ENSMUSG00000054850	40.74622894	2.13705453	0.472771858	4.520265951	6.1762E-06	5.62584E-05	NA
ENSMUSG00000016386	42.29382587	2.249138349	0.497636672	4.519639474	6.1945E-06	5.63818E-05	Mpped2
ENSMUSG00000049687	50.49039959	1.498393967	0.331582392	4.518918987	6.21562E-06	5.65408E-05	Fam109b
ENSMUSG00000096956	830.9409195	0.913382967	0.202126239	4.518873814	6.21694E-06	5.65408E-05	Snhg18
ENSMUSG00000028633	1362.410266	1.052633277	0.233222006	4.513438914	6.37848E-06	5.78177E-05	Ctps
ENSMUSG00000084128	1276.857677	1.058330969	0.234485338	4.513420668	6.37903E-06	5.78177E-05	Esrp2
ENSMUSG00000049321	113.3521982	1.365719555	0.302659587	4.512394833	6.40997E-06	5.8076E-05	Zfp2
ENSMUSG00000097039	165.9577712	1.99119379	0.441584054	4.509206729	6.50705E-06	5.88882E-05	Pvt1
ENSMUSG00000078949	218.2581389	2.951481815	0.654566084	4.509066217	6.51136E-06	5.89047E-05	R3hdm1
ENSMUSG00000020739	1193.994932	1.050486778	0.233130636	4.50600057	6.60609E-06	5.97162E-05	Nup85
ENSMUSG00000000782	680.8886086	1.98474356	0.440497942	4.505681802	6.61602E-06	5.97832E-05	Tcf7
ENSMUSG00000029767	7983.262709	1.109427139	0.24630961	4.504197534	6.66242E-06	6.01111E-05	Calu
ENSMUSG00000034156	136.8882877	2.136818596	0.474619546	4.502171507	6.72627E-06	6.06411E-05	Bzrap1
ENSMUSG00000036368	109.3872597	1.588166276	0.352750766	4.502233391	6.72431E-06	6.06411E-05	Rmdn2
ENSMUSG00000053158	721.8447956	1.715028338	0.380993504	4.501463468	6.74872E-06	6.07973E-05	Fes
ENSMUSG00000024697	378.1579703	2.190420164	0.487150798	4.496390389	6.91168E-06	6.22182E-05	Gna14
ENSMUSG00000054932	45.35461864	2.998600006	0.66701848	4.495527628	6.93976E-06	6.24237E-05	Afp
ENSMUSG000000056737	1900.121461	2.090149856	0.46496488	4.495285439	6.94767E-06	6.24593E-05	Capg
ENSMUSG00000061286	840.6725957	0.856855644	0.190620036	4.495097485	6.95381E-06	6.24791E-05	Exosc5
ENSMUSG00000029176	1324.092354	0.719325948	0.160178357	4.490781151	7.09624E-06	6.36412E-05	Anapc4
ENSMUSG00000053141	238.9851898	2.447898876	0.545095329	4.490772069	7.09655E-06	6.36412E-05	Ptprt
ENSMUSG00000008461	41.54430362	2.53825274	0.565450371	4.488904543	7.15904E-06	6.4129E-05	Fut1
ENSMUSG00000029594	508.548628	1.142733232	0.254768683	4.485375592	7.27856E-06	6.50849E-05	Rbm19
ENSMUSG00000040034	256.954246	1.187798303	0.264817323	4.485349708	7.27944E-06	6.50849E-05	Nup43
ENSMUSG00000035274	173.40342	1.445240031	0.322343171	4.483544753	7.34132E-06	6.55641E-05	Tpbpg
ENSMUSG00000016262	99.96983843	1.290423207	0.288023132	4.480276277	7.45465E-06	6.64513E-05	Sertad4
ENSMUSG00000061458	477.8130998	1.294416449	0.289060217	4.478016599	7.53397E-06	6.7108E-05	Nol10
ENSMUSG000000020430	2008.856798	0.954897465	0.213378084	4.475143123	7.63601E-06	6.78846E-05	Pes1
ENSMUSG00000027327	678.4540321	1.168581362	0.261130881	4.475079161	7.6383E-06	6.78846E-05	1700037H04Rik
ENSMUSG00000028953	1724.343922	0.7934418	0.177296467	4.475226229	7.63304E-06	6.78846E-05	Abcf2
ENSMUSG00000042265	339.0829035	2.800496703	0.626019293	4.473499033	7.69499E-06	6.83117E-05	Trem1
ENSMUSG00000026806	271.2526435	1.210979918	0.270719052	4.473197991	7.70584E-06	6.83569E-05	Ddx31
ENSMUSG00000010760	89.05665272	2.138559658	0.47828877	4.471272986	7.77554E-06	6.8821E-05	Phlda2
ENSMUSG00000023905	1608.494437	2.001285567	0.447680879	4.470339614	7.80955E-06	6.90963E-05	Tnfrsf12a
ENSMUSG00000047844	204.7133979	2.789756682	0.624363091	4.46816399	7.88938E-06	6.96988E-05	Bex4
ENSMUSG00000095567	2877.545663	1.138898853	0.254993396	4.466385682	7.95521E-06	7.02021E-05	Noc2l
ENSMUSG00000031626	658.4277169	1.29709859	0.29057899	4.463841616	8.05031E-06	7.09622E-05	Sorbs2
ENSMUSG00000006728	3405.319363	1.406494806	0.315098714	4.463664068	8.05699E-06	7.09947E-05	Cdk4
ENSMUSG00000026817	305.6784294	1.609762022	0.360644543	4.463569611	8.06054E-06	7.09997E-05	Ak1
ENSMUSG00000031781	903.9331963	0.654329811	0.146631594	4.462406714	8.10442E-06	7.13333E-05	Ciapi1
ENSMUSG00000057113	10727.27197	1.177965901	0.264011681	4.461794625	8.12761E-06	7.15109E-05	Npm1
ENSMUSG00000014907	336.3258428	1.375901204	0.30840813	4.461300044	8.14639E-06	7.16497E-05	Naf1
ENSMUSG00000027804	974.7816347	1.039228152	0.233084211	4.458595232	8.24985E-06	7.24791E-05	Ppid
ENSMUSG00000022992	1036.997382	0.761614378	0.170824232	4.458468046	8.25475E-06	7.24953E-05	Kansl2
ENSMUSG00000069170	44.31005047	1.710591163	0.383753647	4.457524181	8.29117E-06	7.27882E-05	Adgrv1
ENSMUSG00000083012	393.5210388	1.167582571	0.262162369	4.453661958	8.4418E-06	7.40286E-05	Fam220a
ENSMUSG00000037833	19.60394287	1.968698834	0.44206796	4.453385029	8.4527E-06	7.40968E-05	Sh2d4b
ENSMUSG00000028701	115.129008	1.401456322	0.314717146	4.453066321	8.46526E-06	7.41795E-05	Lurap1
ENSMUSG00000066357	1224.539654	1.448665387	0.325478165	4.450883476	8.55177E-06	7.48272E-05	Wdr6
ENSMUSG00000022678	778.0466244	1.358222212	0.305328977	4.448389492	8.65165E-06	7.56176E-05	Nde1
ENSMUSG00000009248	259.9307182	2.627035461	0.590606725	4.448028358	8.66621E-06	7.5717E-05	Ascl2
ENSMUSG00000035960	1348.48986	1.390294754	0.312581082	4.447789182	8.67586E-06	7.57456E-05	Apex1
ENSMUSG000000101438	19.78170877	1.93421307	0.434968149	4.446792424	8.7162E-06	7.60419E-05	NA
ENSMUSG00000048924	130.5103152	1.161524502	0.261265337	4.445765799	8.75793E-06	7.63499E-05	Ccdc125
ENSMUSG00000004207	33312.97053	1.095264491	0.246388304	4.445277926	8.77783E-06	7.64616E-05	Psap
ENSMUSG00000024215	1899.32762	1.931317606	0.434805841	4.441793154	8.92123E-06	7.75742E-05	Spdef
ENSMUSG00000006412	1179.623846	1.167720553	0.263059811	4.438992592	9.03809E-06	7.84468E-05	Pfdn2
ENSMUSG00000030609	807.2379239	1.109608493	0.249968021	4.439001801	9.03771E-06	7.84468E-05	Aen
ENSMUSG00000056459	115.3187334	1.108432514	0.249717372	4.438748105	9.04836E-06	7.85073E-05	Zbtb25
ENSMUSG00000038838	754.5965834	0.775743421	0.174785681	4.438254986	9.06911E-06	7.86586E-05	Vars2
ENSMUSG00000030407	469.8432153	1.068948297	0.24089383	4.437424975	9.10414E-06	7.89336E-05	Qpctl
ENSMUSG00000034723	552.3439727	1.019239532	0.229701313	4.437238593	9.11203E-06	7.89731E-05	Tmx4
ENSMUSG00000040563	154.2350092	1.522857381	0.343267852	4.436353052	9.14957E-06	7.92696E-05	Plppr2

ENSMUSG00000014782	30.16099001	2.005841708	0.452259674	4.4351549	9.20061E-06	7.96537E-05	Plekhhg4
ENSMUSG000000051427	242.3414115	0.966380862	0.217925147	4.434462366	9.23023E-06	7.98509E-05	Ccdc157
ENSMUSG000000020695	680.0494765	2.448726996	0.552329645	4.433452047	9.27361E-06	8.01414E-05	Mrc2
ENSMUSG000000038335	1304.815811	0.991483801	0.22363721	4.433447378	9.27382E-06	8.01414E-05	Tsr1
ENSMUSG000000021270	5072.366415	1.402507047	0.316371871	4.433096538	9.28892E-06	8.02428E-05	Hsp90aa1
ENSMUSG000000027006	3053.176043	1.284327093	0.289729726	4.432845439	9.29975E-06	8.03071E-05	Dnajc10
ENSMUSG000000024500	133.9095623	2.288013832	0.516250755	4.431981574	9.3371E-06	8.06003E-05	Ppp2r2b
ENSMUSG000000032412	2301.41595	0.991281435	0.223738216	4.430541432	9.39968E-06	8.11111E-05	Atp1b3
ENSMUSG000000030888	501.3734393	0.903324749	0.203896946	4.430300538	9.41019E-06	8.11646E-05	Rrp8
ENSMUSG000000027752	586.469924	1.170882541	0.264388329	4.428646861	9.48261E-06	8.16784E-05	Exosc8
ENSMUSG000000037300	670.0945482	0.902948037	0.203927704	4.427785029	9.52057E-06	8.19756E-05	Klhl21
ENSMUSG000000106918	1138.37603	0.792150574	0.178931267	4.427122134	9.54987E-06	8.21791E-05	Mrpl33
ENSMUSG000000019066	2433.338217	1.295652273	0.292706166	4.426460462	9.57919E-06	8.23908E-05	Rab3d
ENSMUSG000000108604	75.58708636	2.520662053	0.569478393	4.4262646	9.58789E-06	8.24357E-05	NA
ENSMUSG000000045752	909.6463428	1.20230397	0.27163469	4.426179765	9.59166E-06	8.24383E-05	Tssc4
ENSMUSG000000027712	2596.795472	1.462099737	0.330378588	4.425528131	9.62066E-06	8.26577E-05	Anxa5
ENSMUSG000000019256	598.113143	1.319581203	0.298183945	4.425393204	9.62668E-06	8.26794E-05	Ahr
ENSMUSG000000022142	687.9369583	0.844569059	0.190862804	4.425006042	9.64396E-06	8.2768E-05	Nup155
ENSMUSG000000050222	40.35889425	1.573419575	0.355571293	4.425046693	9.64214E-06	8.2768E-05	Il17d
ENSMUSG000000029404	1204.869938	0.678471971	0.15340124	4.422858442	9.74036E-06	8.3535E-05	Arl6ip4
ENSMUSG000000018882	1357.746216	0.940544568	0.212677655	4.422394859	9.76129E-06	8.36843E-05	Mrpl45
ENSMUSG000000069421	10.17900404	3.504456933	0.792659329	4.422138824	9.81821E-06	8.41115E-05	Olfr810
ENSMUSG000000032374	778.3510612	1.868933324	0.423619196	4.411823971	1.02503E-05	8.7561E-05	Plod2
ENSMUSG000000054079	799.6945977	1.054917713	0.239231812	4.409604654	1.0356E-05	8.83678E-05	Utp18
ENSMUSG000000050855	60.738698	1.18798302	0.269428526	4.409269639	1.0372E-05	8.84728E-05	Zfp940
ENSMUSG000000027160	920.6792889	1.59416004	0.361577326	4.408904888	1.03895E-05	8.85901E-05	Ccdc34
ENSMUSG000000018651	387.8079713	1.234516158	0.280041911	4.40832643	1.04172E-05	8.87599E-05	Tada2a
ENSMUSG000000045007	80.42961336	1.663150145	0.377409465	4.406752605	1.04932E-05	8.93463E-05	Tubg2
ENSMUSG000000042694	283.0027001	1.165419243	0.264525559	4.405696175	1.05445E-05	8.97186E-05	Obfc1
ENSMUSG000000040596	565.3042018	1.109031996	0.251800922	4.404400065	1.06077E-05	9.01598E-05	Pogk
ENSMUSG000000035234	254.3494096	0.902072169	0.204828626	4.404033693	1.06256E-05	9.028E-05	Fam175a
ENSMUSG000000025035	344.687431	1.16833661	0.265410557	4.401997515	1.07259E-05	9.10014E-05	Arl3
ENSMUSG000000038323	132.0055471	1.224211603	0.278202909	4.400427037	1.08038E-05	9.15645E-05	1700066M21Rik
ENSMUSG000000063844	29.65183635	2.09539888	0.476218853	4.400075442	1.08213E-05	9.16802E-05	Olfr1276
ENSMUSG000000027408	1018.141011	3.099695174	0.705020015	4.396605924	1.09957E-05	9.29698E-05	Cpxm1
ENSMUSG000000053161	4.286308191	4.173509034	0.949275883	4.396518556	1.10001E-05	9.29698E-05	Daw1
ENSMUSG000000025439	1405.96999	0.896707549	0.203981793	4.396017588	1.10255E-05	9.31443E-05	Clns1a
ENSMUSG000000024350	388.0047442	1.031689328	0.234753922	4.394769297	1.1089E-05	9.36146E-05	Dnajc18
ENSMUSG000000086283	24.5793035	2.248161633	0.511646768	4.393972123	1.11298E-05	9.38586E-05	NA
ENSMUSG000000032487	1309.319527	3.092093146	0.704017251	4.392070137	1.12276E-05	9.45284E-05	Ptgs2
ENSMUSG000000047022	118.7222064	1.330125229	0.302929258	4.390877391	1.12894E-05	9.50023E-05	Mipol1
ENSMUSG00000003276	46.23296201	1.768426127	0.402868545	4.389586002	1.13567E-05	9.55343E-05	Stk36
ENSMUSG000000005986	102.880952	2.035932469	0.463832058	4.389374198	1.13677E-05	9.55936E-05	Ankrd13d
ENSMUSG000000018727	13.3944903	4.067557797	0.927654315	4.384777532	1.16104E-05	9.76E-05	Cpsf4l
ENSMUSG000000037035	883.4960583	2.176806497	0.496684488	4.382674613	1.17231E-05	9.84427E-05	Inhbb
ENSMUSG000000053716	247.6463925	1.324794573	0.302589899	4.378185051	1.19672E-05	0.00010035	Dusp7
ENSMUSG000000028851	2384.220328	0.924479402	0.211197173	4.377328483	1.20143E-05	0.00010071	Nudc
ENSMUSG000000047090	334.5740864	0.955299369	0.21839263	4.374228976	1.21862E-05	0.000101971	Tmem198b
ENSMUSG000000006720	34.9345821	1.616604183	0.369590114	4.374046057	1.21965E-05	0.000102021	Zfp184
ENSMUSG000000094732	6.112428251	4.355253836	0.996213494	4.371807711	1.23222E-05	0.000103036	1500015L24Rik
ENSMUSG000000031919	458.7262085	3.05134361	0.698033807	4.371340727	1.23486E-05	0.000103148	Tmed6
ENSMUSG000000027298	341.5001068	1.237422655	0.283102872	4.370929357	1.23719E-05	0.000103306	Tyro3
ENSMUSG000000021506	533.0631796	1.658919571	0.37955069	4.370745766	1.23823E-05	0.000103357	Pitx1
ENSMUSG000000033233	82.19872276	1.794259748	0.410528098	4.370613749	1.23898E-05	0.000103383	Trim45
ENSMUSG000000017404	9811.784924	0.718321347	0.164417756	4.368879413	1.24886E-05	0.000104134	Rpl19
ENSMUSG000000050071	668.3693614	2.761351214	0.632639022	4.364813296	1.27231E-05	0.000106033	Bex1
ENSMUSG000000022587	17897.01402	2.347933923	0.537966829	4.364458541	1.27438E-05	0.000106151	Ly6e
ENSMUSG000000015709	619.9972803	1.119269793	0.256461336	4.364282782	1.27541E-05	0.000106199	Arnt2
ENSMUSG000000007379	50.80044715	1.435292136	0.328938372	4.363407429	1.28052E-05	0.00010655	Dennd2c
ENSMUSG000000095677	99.1865889	1.335671527	0.306139235	4.362954417	1.28318E-05	0.000106734	Dynl1f
ENSMUSG000000018809	131.8775775	1.279207907	0.293227076	4.362516327	1.28575E-05	0.000106873	Smyd4
ENSMUSG000000053931	2787.28841	1.327952543	0.304470875	4.361509269	1.29168E-05	0.000107263	Cnn3
ENSMUSG000000057123	102.5070621	1.574245734	0.360942212	4.361489681	1.2918E-05	0.000107263	Gja5
ENSMUSG000000032002	1180.687995	0.952875593	0.218507644	4.360834131	1.29568E-05	0.000107531	Dcun1d5
ENSMUSG000000086544	32.40810924	1.675269479	0.384202865	4.36037737	1.29838E-05	0.000107659	Chn1os3
ENSMUSG000000111086	5.97645748	3.956577227	0.90795158	4.357696285	1.31439E-05	0.000108796	NA
ENSMUSG000000031298	228.2770626	1.578063017	0.362335791	4.355250178	1.32915E-05	0.000109942	Adgrg2

ENSMUSG00000035954	192.1471122	1.083874437	0.249060696	4.351848575	1.34994E-05	0.000111507	Dock4
ENSMUSG00000032076	1048.877246	1.884687641	0.433196303	4.350654948	1.35732E-05	0.000112076	Cadm1
ENSMUSG00000002688	156.2993807	1.32267946	0.304039649	4.35035189	1.35919E-05	0.000112192	Prkd1
ENSMUSG00000085696	64.70132751	2.167570401	0.498357043	4.349432663	1.3649E-05	0.000112554	Hoxaas3
ENSMUSG00000059434	13.78103101	2.47680895	0.569685107	4.347680708	1.37585E-05	0.00011322	Gckr
ENSMUSG00000100431	44.1085365	1.753325943	0.40366396	4.343528574	1.40212E-05	0.000115056	NA
ENSMUSG00000036667	551.502667	0.963173518	0.221865377	4.341252025	1.41673E-05	0.000116095	Tcaf1
ENSMUSG00000049538	30.88844262	3.271420558	0.753647726	4.340782096	1.41976E-05	0.000116303	Adamts16
ENSMUSG00000022370	1218.60347	1.215875223	0.280195724	4.339378225	1.42886E-05	0.000116847	Mrpl13
ENSMUSG00000030630	206.1043499	1.329487368	0.306375221	4.339408924	1.42866E-05	0.000116847	Fah
ENSMUSG00000002210	924.8058952	0.749425264	0.172707048	4.339285927	1.42946E-05	0.000116856	Smg9
ENSMUSG00000027848	975.7334451	1.916523198	0.441791018	4.338076416	1.43735E-05	0.00011746	Olfml3
ENSMUSG00000039058	46.87132102	3.054841725	0.704309555	4.33735664	1.44207E-05	0.000117805	Ak5
ENSMUSG00000017210	1327.87865	0.659865	0.152251572	4.334043924	1.46395E-05	0.000119511	Med24
ENSMUSG00000023008	698.6190099	1.843554533	0.425382424	4.333875658	1.46507E-05	0.00011956	Fmn13
ENSMUSG00000055612	2019.806076	1.86471175	0.43047924	4.331711206	1.47955E-05	0.000120573	Cdca7
ENSMUSG00000056501	997.268913	1.457062251	0.336427656	4.330982378	1.48446E-05	0.000120894	Cebpb
ENSMUSG00000063687	34.5613936	2.504611926	0.578946516	4.326154245	1.51735E-05	0.000123446	Pcdhb5
ENSMUSG00000027360	500.726635	2.636839942	0.609578015	4.325680846	1.52061E-05	0.000123669	Hdc
ENSMUSG00000030137	28.65247483	2.562053652	0.592387648	4.324961299	1.52559E-05	0.000124031	Tuba8
ENSMUSG00000045319	747.9702279	1.689224142	0.390585703	4.324848887	1.52636E-05	0.000124041	Proser2
ENSMUSG000000108236	4.36910051	4.36910051	1.010491972	4.323735994	1.53409E-05	0.000124467	NA
ENSMUSG00000107511	20.87969876	1.881128285	0.435129718	4.323143666	1.53821E-05	0.000124759	NA
ENSMUSG00000063011	1789.817344	2.199737417	0.508839206	4.32305017	1.53887E-05	0.000124769	Msln
ENSMUSG00000040652	1927.083231	0.841179735	0.194587506	4.322886668	1.54001E-05	0.000124819	Oaz2
ENSMUSG00000002297	719.636386	1.586355934	0.36706488	4.32173172	1.54809E-05	0.000125389	Dbf4
ENSMUSG00000019261	585.7191263	1.244889589	0.28856098	4.314130034	1.60233E-05	0.000129121	Map1s
ENSMUSG00000038954	175.4079988	1.424899522	0.330312439	4.313793101	1.60477E-05	0.000129274	Supt3
ENSMUSG00000022236	16.09626688	1.877737037	0.435648721	4.310209002	1.631E-05	0.000131076	Ropn1l
ENSMUSG00000002279	582.4904331	1.52122802	0.352997643	4.309456588	1.63656E-05	0.000131478	Lmf1
ENSMUSG00000032320	1113.566304	1.186848624	0.275441999	4.308887631	1.64078E-05	0.000131728	Rcn2
ENSMUSG000000034362	9.390605503	2.983503798	0.692612693	4.307607742	1.6503E-05	0.000132447	Csta1
ENSMUSG00000010911	213.5976113	1.51071287	0.350758345	4.306990532	1.65491E-05	0.000132638	Apip
ENSMUSG00000067071	2004.790354	1.337999689	0.310652996	4.307055481	1.65442E-05	0.000132638	Hes6
ENSMUSG00000074796	115.2912441	2.348332811	0.545223562	4.307100746	1.65408E-05	0.000132638	Slc4a11
ENSMUSG00000037010	189.9000714	2.039281306	0.473550776	4.306362503	1.65961E-05	0.000132925	Apln
ENSMUSG00000003500	827.8886508	1.337655	0.310683821	4.305518691	1.66595E-05	0.000133388	Impdh1
ENSMUSG00000022949	852.263667	1.535151686	0.356561806	4.305429417	1.66662E-05	0.000133397	Clic6
ENSMUSG00000031093	656.7198761	0.910887238	0.211608732	4.304582475	1.67301E-05	0.000133818	Dock11
ENSMUSG00000030759	905.1149164	1.552650075	0.360889838	4.302282608	1.69048E-05	0.000135087	Far1
ENSMUSG00000057176	72.13689153	1.688729924	0.392639795	4.300964772	1.70056E-05	0.000135702	Ccdc189
ENSMUSG000000027674	115.758131	2.200959808	0.511876845	4.299783887	1.70965E-05	0.000136336	Pex5l
ENSMUSG00000035198	655.0400805	1.266708381	0.29477346	4.297226701	1.72948E-05	0.000137779	Tubg1
ENSMUSG00000046203	9.213509623	4.210053208	0.979748988	4.29707329	1.73068E-05	0.000137828	Spr2g
ENSMUSG00000020629	783.6073884	0.933489458	0.217320797	4.295444675	1.74344E-05	0.000138797	Adi1
ENSMUSG00000024659	2976.003617	2.013975915	0.469006478	4.294132405	1.75378E-05	0.00013948	Anxa1
ENSMUSG00000109532	7.77295063	3.423111019	0.79715143	4.294179111	1.75341E-05	0.00013948	NA
ENSMUSG00000031851	398.7958521	0.878964811	0.204787558	4.292081121	1.77006E-05	0.000140634	Ntpcr
ENSMUSG00000040133	115.7557039	2.444997964	0.569745986	4.291382519	1.77564E-05	0.000141014	Gpr176
ENSMUSG00000039607	430.902563	1.3067157	0.304576333	4.290273265	1.78453E-05	0.000141547	Rbms3
ENSMUSG00000032215	732.2707756	0.990194618	0.230838888	4.289548552	1.79037E-05	0.000141868	Rsl24d1
ENSMUSG00000021539	43.10445387	3.478650493	0.811036135	4.289143654	1.79363E-05	0.000142032	Lect2
ENSMUSG00000049823	230.8346552	1.141769141	0.266283824	4.287790093	1.8046E-05	0.000142852	Zbtb12
ENSMUSG00000032968	48.02884029	1.627441805	0.379723512	4.285859989	1.82034E-05	0.000143907	Inha
ENSMUSG00000022123	41.38080695	2.320557242	0.541606787	4.284579324	1.83085E-05	0.000144594	Scel
ENSMUSG00000026787	63.60891687	2.102066808	0.490767235	4.28322565	1.84203E-05	0.00014538	Gad2
ENSMUSG00000010064	54.28764106	2.474852525	0.578497262	4.278071284	1.8852E-05	0.000148392	Slc38a3
ENSMUSG00000020929	2757.322766	0.888981137	0.207865805	4.276706977	1.89678E-05	0.000149065	Eftud2
ENSMUSG00000056071	4912.626532	2.655971902	0.62124941	4.27521034	1.90957E-05	0.000149913	S100a9
ENSMUSG00000030410	472.7208041	1.19360471	0.279254192	4.274258874	1.91774E-05	0.000150505	Dmwd
ENSMUSG00000026627	166.3208977	1.444966107	0.338137011	4.273315429	1.92588E-05	0.000150994	Tmem206
ENSMUSG00000031982	104.1596059	0.899630241	0.21063834	4.270971005	1.94624E-05	0.000152389	Arv1
ENSMUSG00000043168	61.43556105	3.212523218	0.752550304	4.268848476	1.96485E-05	0.00015364	NA
ENSMUSG00000039842	262.5210991	1.214311607	0.284482718	4.268489889	1.96801E-05	0.000153789	Mcph1
ENSMUSG00000029710	1993.925108	1.063294028	0.24919851	4.266855474	1.98247E-05	0.000154869	Ephb4
ENSMUSG00000052033	415.8942909	1.196213821	0.280410986	4.265930663	1.99071E-05	0.000155342	Pfdn4
ENSMUSG00000021483	98.3762966	1.376813876	0.32275775	4.26578099	1.99204E-05	0.000155361	Cdk20



ENSMUSG00000100094	22.03016354	1.99729238	0.468421466	4.263878849	2.00908E-05	0.000156587	NA
ENSMUSG00000049439	430.8180661	0.950768573	0.223014953	4.263250343	2.01475E-05	0.000156977	Cyp20a1
ENSMUSG00000028613	334.49802	1.931829966	0.453221304	4.262442978	2.02204E-05	0.000157494	Lrp8
ENSMUSG00000001025	21803.34468	1.296646355	0.304264511	4.261576055	2.0299E-05	0.000157899	S100a6
ENSMUSG00000028948	853.8561681	0.686508433	0.161099981	4.261381216	2.03167E-05	0.000157985	Nol9
ENSMUSG00000034758	85.80786327	1.517110079	0.356171653	4.259491367	2.04893E-05	0.000159222	Tle6
ENSMUSG00000044060	30.62905425	2.025497024	0.475639647	4.258469697	2.05831E-05	0.000159899	A830010M20Rik
ENSMUSG00000049191	120.7709817	1.020975417	0.239780163	4.257964474	2.06297E-05	0.000160209	Rgag4
ENSMUSG00000047342	40.95034646	1.510070753	0.354758718	4.256613513	2.07547E-05	0.000161127	Zfp286
ENSMUSG00000035776	664.9147484	1.058195099	0.248621034	4.256257333	2.07877E-05	0.000161331	Cd99l2
ENSMUSG00000062963	2402.643125	0.790016821	0.185664332	4.255081262	2.08973E-05	0.000162128	Ufc1
ENSMUSG00000033965	280.0434811	1.627585429	0.382562551	4.254429565	2.09583E-05	0.000162495	Slc16a2
ENSMUSG00000096145	228.337104	0.883731823	0.207809223	4.252611176	2.11292E-05	0.000163767	Vkorc1
ENSMUSG00000043895	271.5777938	2.133290014	0.501822001	4.251089048	2.12734E-05	0.000164669	S1pr2
ENSMUSG00000028599	1670.052959	1.736320306	0.408537763	4.25008521	2.13689E-05	0.000165355	Tnfrsf1b
ENSMUSG00000022234	7639.767787	1.088989587	0.256353024	4.248007569	2.1568E-05	0.000166733	Cct5
ENSMUSG00000010406	1664.678541	1.078618402	0.253954928	4.247282818	2.16379E-05	0.000167218	Mrpl52
ENSMUSG00000015093	23.03125025	2.43386398	0.573276815	4.245530111	2.18077E-05	0.000168421	Clic3
ENSMUSG00000020654	371.2316227	1.351276496	0.318399882	4.243960422	2.19609E-05	0.000169494	Adcy3
ENSMUSG00000090266	424.360993	0.802235208	0.189190381	4.240359388	2.23162E-05	0.000171957	Mettl23
ENSMUSG00000026939	323.6236805	1.119550695	0.264031384	4.240218264	2.23303E-05	0.00017201	Tmem141
ENSMUSG00000014603	61.10062266	4.649977795	1.096796502	4.239599403	2.23919E-05	0.000172373	Alx3
ENSMUSG00000020900	625.484268	1.522597322	0.359302325	4.237649507	2.25872E-05	0.000173768	Myh10
ENSMUSG00000020925	601.4558379	1.037505419	0.244830708	4.237644153	2.25877E-05	0.000173768	Ccdc43
ENSMUSG00000052563	307.4114825	1.864762032	0.4404142	4.23410969	2.29459E-05	0.000176295	D930048N14Rik
ENSMUSG00000035378	225.017451	1.099126293	0.259630746	4.233421148	2.30163E-05	0.000176778	Shq1
ENSMUSG00000026019	537.4145775	1.107359934	0.261665864	4.231961772	2.31662E-05	0.000177872	Wdr12
ENSMUSG00000003873	1069.085806	0.882836378	0.208640093	4.231384138	2.32258E-05	0.000178214	Bax
ENSMUSG00000046191	39.18902208	1.285367353	0.303894829	4.229645357	2.3406E-05	0.000179481	Pcdhb20
ENSMUSG00000022651	1099.541558	2.766438034	0.654199121	4.228740064	2.35004E-05	0.000180089	Retnlg
ENSMUSG00000045482	1489.748491	0.711993382	0.168416625	4.227571843	2.36227E-05	0.000180909	Trrap
ENSMUSG000000032285	324.6433607	0.979827717	0.23178975	4.227226262	2.3659E-05	0.000181129	Dnaja4
ENSMUSG00000096847	73.00206961	1.745759176	0.413064714	4.22635756	2.37504E-05	0.000181771	Tmem151b
ENSMUSG00000085175	128.13495	1.294381569	0.306314863	4.225657078	2.38245E-05	0.000182278	Gm11423
ENSMUSG00000021113	512.6048441	1.293591439	0.306258781	4.223850943	2.40163E-05	0.000183628	Snapc1
ENSMUSG00000064165	5.968926956	4.258629864	1.009659835	4.217885784	2.46604E-05	0.000187761	Krt39
ENSMUSG00000087589	57.15327324	1.357425586	0.321831109	4.217819677	2.46676E-05	0.000187761	NA
ENSMUSG00000094504	4.667493234	4.135240863	0.980599547	4.217053611	2.47515E-05	0.000188219	Gm5294
ENSMUSG00000024542	407.9492766	0.971293332	0.230344746	4.216694106	2.4791E-05	0.000188459	Cep192
ENSMUSG00000013698	2063.848797	1.810372433	0.429636838	4.213727204	2.51191E-05	0.000190682	Pea15a
ENSMUSG00000014725	47.18165496	2.516457079	0.597197453	4.213777316	2.51135E-05	0.000190682	Adam28
ENSMUSG000000030598	108.685821	1.734878913	0.411724682	4.21368693	2.51235E-05	0.000190682	Fbxo17
ENSMUSG00000087659	18.82986304	3.307847136	0.785010381	4.213762286	2.51152E-05	0.000190682	NA
ENSMUSG00000051043	217.9091517	2.148204245	0.510054022	4.211719056	2.53435E-05	0.00019229	Gprc5c
ENSMUSG00000041638	1963.270239	0.64093262	0.152217194	4.210645346	2.54642E-05	0.000193021	Gcn1l1
ENSMUSG00000069769	1440.18514	0.983767842	0.233634306	4.21071657	2.54562E-05	0.000193021	Msi2
ENSMUSG00000041530	1625.596736	1.036470157	0.246311855	4.207958878	2.57688E-05	0.000195205	Ago1
ENSMUSG00000048755	457.0570645	0.879420888	0.209038515	4.206980167	2.58806E-05	0.00019574	Mcat
ENSMUSG00000034321	369.0696538	1.084329987	0.257845821	4.205342485	2.60687E-05	0.000196975	Exosc1
ENSMUSG00000021013	124.6345172	1.28791906	0.306315107	4.204556121	2.61595E-05	0.000197598	Ttc8
ENSMUSG00000044674	794.2448288	1.958562694	0.466084329	4.202163799	2.64376E-05	0.000199445	Fzd1
ENSMUSG00000039462	6.452533236	4.283721817	1.020249484	4.198700302	2.68451E-05	0.000202198	Col10a1
ENSMUSG00000004127	163.3894381	1.117296868	0.266340444	4.194995143	2.72877E-05	0.000205142	Trmt10a
ENSMUSG00000024593	29.65489884	2.115869459	0.504673027	4.192555071	2.7583E-05	0.000207165	Megf10
ENSMUSG00000046782	129.5713716	1.116001494	0.266440483	4.188558291	2.80732E-05	0.000210717	Ttc6
ENSMUSG00000034501	205.7186465	1.040200876	0.248350563	4.188437765	2.80881E-05	0.000210759	Pcnx4
ENSMUSG00000032480	1146.750414	0.629394929	0.150313658	4.187210524	2.82404E-05	0.000211767	Dhx30
ENSMUSG00000030717	3065.613294	2.079265137	0.49670861	4.18608636	2.83805E-05	0.000212751	Nupr1
ENSMUSG00000034394	391.8010676	1.828171705	0.436794612	4.185426413	2.84631E-05	0.000213236	Lif
ENSMUSG00000037070	368.9593808	1.299170127	0.310439231	4.184941842	2.85239E-05	0.000213624	Rbmxl1
ENSMUSG00000017204	118.8641867	2.259799638	0.540120557	4.183880074	2.86575E-05	0.000214422	Gsdma
ENSMUSG000000041559	244.2965947	2.592888652	0.619725285	4.183932327	2.86509E-05	0.000214422	Fmod
ENSMUSG00000040250	632.5578095	0.645859943	0.154395368	4.183156221	2.8749E-05	0.000215038	Asun
ENSMUSG00000001435	3159.604726	1.707441517	0.40828878	4.181945721	2.89025E-05	0.000215982	Col18a1
ENSMUSG00000032491	163.0513112	1.556638458	0.372337357	4.180720599	2.90587E-05	0.000217013	Nradd
ENSMUSG00000037306	390.2233414	1.394492509	0.333612824	4.179972737	2.91544E-05	0.000217591	Man1c1
ENSMUSG00000030411	90.25363211	1.635608762	0.391332415	4.179589272	2.92036E-05	0.00021789	Nova2



ENSMUSG00000022766	7.917966401	2.723323514	0.651629911	4.179248788	2.92474E-05	0.000218011	Serpind1
ENSMUSG00000006205	1516.227272	2.083166289	0.498646967	4.177637541	2.94553E-05	0.000219285	Htra1
ENSMUSG00000028479	2758.44706	1.084028063	0.25956463	4.176331966	2.96247E-05	0.000220271	Gne
ENSMUSG00000026955	183.2643531	1.496778085	0.358427721	4.175955143	2.96738E-05	0.000220567	Sapcd2
ENSMUSG00000044080	1305.531097	1.256219661	0.30111432	4.171902755	3.02067E-05	0.000223827	S100a1
ENSMUSG00000051048	56.05162069	2.635792234	0.632181827	4.169357807	3.05459E-05	0.000226059	P4ha3
ENSMUSG00000025040	508.6620497	0.952104502	0.228441887	4.167819277	3.07528E-05	0.000227306	Fundc1
ENSMUSG00000074916	150.0546396	1.467556624	0.352214692	4.166653622	3.09104E-05	0.000228383	Chst14
ENSMUSG00000078784	714.6790881	0.662428791	0.159128196	4.162862435	3.14283E-05	0.000231866	1810022K09Rik
ENSMUSG00000045538	312.9655801	0.785014837	0.188587568	4.162601194	3.14643E-05	0.00023206	Ddx28
ENSMUSG00000040681	3682.327374	0.96922286	0.232954483	4.160567529	3.17458E-05	0.000233846	NA
ENSMUSG00000059182	1585.512631	1.00020547	0.240588832	4.157322935	3.21999E-05	0.000236897	Skap2
ENSMUSG00000047649	354.7210717	1.164474831	0.28013477	4.156837901	3.22683E-05	0.000237327	Cd3eap
ENSMUSG00000030701	402.0225282	1.519366724	0.365552163	4.156360918	3.23357E-05	0.000237602	Plekhb1
ENSMUSG00000046223	1667.701249	2.260404098	0.544089619	4.154470184	3.26042E-05	0.000239427	Plaur
ENSMUSG00000000167	31.38905265	1.741506992	0.419199213	4.154366079	3.26191E-05	0.000239462	Pih1d2
ENSMUSG00000029149	999.7467822	1.111466416	0.267768651	4.150845934	3.31249E-05	0.000242875	Krtcap3
ENSMUSG00000026043	19698.09045	2.819983912	0.679413906	4.150612592	3.31587E-05	0.000242987	Col3a1
ENSMUSG00000040824	1912.725308	1.143985698	0.275716905	4.149131501	3.33739E-05	0.000244399	Snrpd2
ENSMUSG00000085156	240.6049781	1.199236844	0.289282015	4.145563092	3.3898E-05	0.000247778	Snhg15
ENSMUSG00000094724	167.7968391	1.891767214	0.456329047	4.14562085	3.38894E-05	0.000247778	Rnaset2b
ENSMUSG00000025133	1016.635936	0.914888005	0.220706816	4.145263937	3.39423E-05	0.000248026	Ints4
ENSMUSG00000024598	108.4609858	2.697516738	0.650778516	4.145061142	3.39723E-05	0.000248169	NA
ENSMUSG00000044339	150.8884423	1.744578135	0.4213098	4.140843945	3.4603E-05	0.000252466	Alkbh2
ENSMUSG00000022913	471.292285	0.918786465	0.221942603	4.139748086	3.47687E-05	0.000253286	Psmg1
ENSMUSG00000068758	282.7565685	1.600101536	0.386516134	4.139805295	3.47601E-05	0.000253286	Il3ra
ENSMUSG00000047221	343.0293194	1.187136849	0.286844546	4.138607008	3.49421E-05	0.000254237	Fam185a
ENSMUSG000000104708	775.2628567	2.434708113	0.588467453	4.137370894	3.51308E-05	0.000255454	NA
ENSMUSG00000064272	44.78275792	1.345229398	0.32519056	4.136741841	3.52272E-05	0.000256076	Gpbar1
ENSMUSG00000097265	5.070237202	3.776905406	0.913207624	4.135867143	3.53617E-05	0.000256975	NA
ENSMUSG00000052942	167.0209108	1.447825882	0.35018884	4.134414682	3.5586E-05	0.000258369	Glis3
ENSMUSG000000035020	15.54822914	3.015495774	0.729404243	4.134190065	3.56209E-05	0.000258542	Epgn
ENSMUSG00000024560	1143.424386	0.652902781	0.157934593	4.134007439	3.56492E-05	0.000258642	Cxxc1
ENSMUSG00000028664	2090.667838	1.526071518	0.369154804	4.133960874	3.56564E-05	0.000258642	Ephb2
ENSMUSG00000060166	488.0249698	1.322805197	0.320353894	4.129199682	3.64028E-05	0.000263493	Zdhhc8
ENSMUSG00000029344	687.5484984	0.665862029	0.161316212	4.127682034	3.66438E-05	0.000265157	Tpst2
ENSMUSG00000089987	1011.293931	1.864282004	0.451820681	4.126154651	3.68879E-05	0.000266761	NA
ENSMUSG00000062007	127.5700418	0.849828126	0.206079092	4.123795952	3.72679E-05	0.000269263	Hsh2d
ENSMUSG00000053338	96.31816484	2.577149413	0.625256276	4.121748973	3.76007E-05	0.000271337	Tarm1
ENSMUSG00000000402	34.13690195	2.455890454	0.595848826	4.121667021	3.76141E-05	0.000271351	Egfl6
ENSMUSG00000047945	6020.529933	1.859460802	0.451286423	4.120356178	3.78287E-05	0.000272569	Marcks1
ENSMUSG000000015126	460.3925864	0.864188138	0.209755687	4.119974768	3.78914E-05	0.000272937	Tsr3
ENSMUSG00000021572	101.2126705	1.242343603	0.301846809	4.115808306	3.85825E-05	0.000277579	Cep72
ENSMUSG00000032383	9277.97882	0.912759225	0.221784787	4.11551773	3.86311E-05	0.000277845	Ppiib
ENSMUSG00000041889	131.8370039	2.083034721	0.506226393	4.114828366	3.87468E-05	0.000278508	Shisa4
ENSMUSG00000040372	10.58779484	2.242176463	0.545070292	4.113554703	3.89613E-05	0.00027988	Gpr63
ENSMUSG00000028643	439.5588402	0.9809182	0.238465186	4.113465007	3.89764E-05	0.000279904	Svbp
ENSMUSG00000029752	2099.311891	1.582083176	0.384889695	4.110484634	3.9483E-05	0.000283029	Asns
ENSMUSG00000027793	50.70210377	2.877089062	0.700125247	4.109391962	3.96702E-05	0.0002842	Ccna1
ENSMUSG00000075232	516.7614982	1.140509849	0.277580748	4.108749814	3.97807E-05	0.000284819	Amd1
ENSMUSG00000058006	487.0777706	0.950425388	0.231406578	4.107166684	4.00542E-05	0.000286519	Mdn1
ENSMUSG000000041995	351.2452955	0.858384736	0.209066367	4.105800214	4.02918E-05	0.000287845	Zbed3
ENSMUSG00000062061	284.8435807	4.465932705	1.088062162	4.104483054	4.0522E-05	0.000289255	Obp2a
ENSMUSG00000026234	16157.19741	1.065926964	0.259765918	4.103413465	4.07099E-05	0.000290422	Ncl
ENSMUSG00000046058	135.2130395	1.610635722	0.392615003	4.10232851	4.09013E-05	0.000291612	Eid2
ENSMUSG00000086144	4.989546522	4.109737806	1.002172818	4.100827455	4.11675E-05	0.000293422	NA
ENSMUSG00000036907	12.20356962	4.13883008	1.009438745	4.100129998	4.12918E-05	0.00029422	C1ql2
ENSMUSG00000005674	665.2678888	1.158086533	0.282484206	4.099650564	4.13774E-05	0.000294734	Tomm40l
ENSMUSG00000073600	58.79303342	1.286740068	0.313902507	4.099171046	4.14633E-05	0.000295176	Prob1
ENSMUSG00000020547	2361.247306	1.163136328	0.283796875	4.098481799	4.15869E-05	0.00029579	Bzw2
ENSMUSG00000026694	363.0766205	0.998576754	0.243806255	4.095779877	4.2075E-05	0.000298993	Mettl13
ENSMUSG000000031375	9313.597561	2.19222079	0.535282483	4.095446538	4.21355E-05	0.000299334	Bgn
ENSMUSG00000029408	1017.497731	1.745031468	0.426111844	4.095242818	4.21726E-05	0.000299508	Abcb9
ENSMUSG00000037386	97.05559664	1.223004365	0.298796172	4.093105874	4.25633E-05	0.000302102	Rims2
ENSMUSG00000028683	376.2834149	0.990365104	0.242038483	4.091767114	4.28098E-05	0.000303398	Eif2b3
ENSMUSG00000017715	1744.474266	0.755794928	0.184792714	4.089960635	4.31446E-05	0.000305589	Pgs1
ENSMUSG00000037824	1686.772244	1.043694042	0.255394629	4.086593541	4.37753E-05	0.000309502	Tspan14

ENSMUSG00000026185	3931.368401	1.525482047	0.373372788	4.085680847	4.39478E-05	0.000310629	Igfbp5
ENSMUSG00000026790	991.0581176	0.672943889	0.16472524	4.085250611	4.40293E-05	0.000311112	Odf2
ENSMUSG00000034634	1041.075657	2.480748845	0.60729903	4.084888537	4.4098E-05	0.000311338	Ly6d
ENSMUSG00000048668	710.5432762	0.789816058	0.193351334	4.084875148	4.41005E-05	0.000311338	Rhno1
ENSMUSG00000029703	487.76937	0.78834344	0.193001277	4.084654014	4.41425E-05	0.000311542	Lrwd1
ENSMUSG00000062115	665.8961451	0.884350975	0.216572011	4.083403803	4.43808E-05	0.000313038	Rai1
ENSMUSG00000051855	144.2141432	2.002969636	0.490794014	4.081080001	4.48269E-05	0.000315988	Mest
ENSMUSG00000026548	176.9271832	1.976191382	0.484364242	4.079969601	4.50416E-05	0.000317133	Slamf9
ENSMUSG00000028576	266.9677065	0.778394833	0.19080171	4.079600919	4.51131E-05	0.000317355	Ift74
ENSMUSG00000075410	21.91448554	2.600009332	0.637422791	4.078940022	4.52415E-05	0.000318164	Gm11744
ENSMUSG00000041406	148.8655769	1.466876645	0.360039092	4.074214926	4.61698E-05	0.0003245	BC055324
ENSMUSG00000029560	497.1244998	1.300969116	0.319523366	4.071593051	4.66927E-05	0.000327766	Snx8
ENSMUSG00000086596	37.14745747	2.429821613	0.596782081	4.071539157	4.67035E-05	0.000327766	Susd5
ENSMUSG00000039512	381.7275658	1.023439761	0.251374124	4.071380722	4.67353E-05	0.000327892	Uhrf1bp1
ENSMUSG00000034118	360.2043563	1.097722166	0.269640073	4.071064642	4.67988E-05	0.000328241	Tpst1
ENSMUSG00000107759	4.995895101	4.093989648	1.006126993	4.069058553	4.72035E-05	0.000330591	NA
ENSMUSG00000034211	1127.870121	0.718130928	0.176533295	4.067963099	4.74259E-05	0.000331953	Mrps17
ENSMUSG00000047881	2268.270913	0.801053292	0.19709444	4.064311975	4.81744E-05	0.000336894	Rel1
ENSMUSG00000026603	1151.397997	0.963798033	0.237153604	4.064024397	4.82338E-05	0.000337211	Smyd2
ENSMUSG00000023349	274.2233686	1.811315398	0.445779223	4.063256659	4.83928E-05	0.000338223	Clec4n
ENSMUSG00000021023	543.2518704	1.304326188	0.321108697	4.061945999	4.86653E-05	0.000339814	111008L16Rik
ENSMUSG00000025760	167.9496301	1.146505681	0.282251851	4.061995261	4.86551E-05	0.000339814	Gemin6
ENSMUSG00000038980	40.93952732	2.504655852	0.616866803	4.060286335	4.90126E-05	0.000342051	Rbbp8nl
ENSMUSG00000055334	198.7742005	0.954977306	0.235254555	4.059336091	4.92124E-05	0.000343223	Snupn
ENSMUSG00000041684	340.6210553	0.771018927	0.189967325	4.058692332	4.93483E-05	0.00034399	Bivm
ENSMUSG00000074415	441.4397302	2.082240345	0.51306849	4.058406205	4.94088E-05	0.000344311	3110039I08Rik
ENSMUSG00000030523	17.59358786	2.396570653	0.590634478	4.057620647	4.95752E-05	0.000345369	Trpm1
ENSMUSG00000036275	4675.272634	0.911049991	0.224601874	4.056288463	4.98587E-05	0.000347242	9530068E07Rik
ENSMUSG00000025470	329.2699974	0.930516858	0.229477183	4.054942827	5.01466E-05	0.000348838	Zfp511
ENSMUSG00000106688	22.21159395	2.325379658	0.573511422	4.054635306	5.02126E-05	0.000349195	NA
ENSMUSG00000020720	2174.943961	0.889209709	0.219312512	4.054532499	5.02347E-05	0.000349234	Psmd12
ENSMUSG000000022433	1504.306371	1.014258404	0.250390677	4.050703553	5.10639E-05	0.000354389	Csnk1e
ENSMUSG00000044788	193.4710397	1.439754535	0.355585199	4.048972055	5.14431E-05	0.000356708	Fads6
ENSMUSG00000050288	282.2746592	1.165490764	0.287884334	4.048468875	5.15538E-05	0.000357267	Fzd2
ENSMUSG00000104686	24.06068897	1.833859703	0.452991465	4.048331688	5.1584E-05	0.000357372	NA
ENSMUSG00000039809	49.55602901	2.762962585	0.682562153	4.047928199	5.1673E-05	0.000357884	Gabbr2
ENSMUSG00000017737	1069.219695	1.839934814	0.454610831	4.047274477	5.18175E-05	0.00035878	Mmp9
ENSMUSG00000038180	26.47976411	2.248627137	0.555622926	4.047038072	5.18698E-05	0.000358934	Spag4
ENSMUSG00000040502	262.543048	1.269392798	0.313814654	4.045039899	5.23142E-05	0.000361693	March9
ENSMUSG00000033355	336.0065956	1.696733399	0.419712565	4.04260806	5.28599E-05	0.000365253	Rtp4
ENSMUSG00000021175	685.9638466	1.532013578	0.379186827	4.040260553	5.33919E-05	0.000368286	Cdca7l
ENSMUSG00000039976	725.7215208	1.08292322	0.268057342	4.0398939	5.34754E-05	0.000368755	Tbcl1d16
ENSMUSG00000085133	371.8015903	1.136221483	0.281408891	4.037617573	5.39968E-05	0.000371703	NA
ENSMUSG00000044636	156.5025539	2.271219536	0.562649994	4.036647226	5.42205E-05	0.000373108	Csrnp2
ENSMUSG00000035164	131.0949855	1.482737671	0.367394205	4.035822151	5.44114E-05	0.000374232	Zc3h12c
ENSMUSG00000022272	1388.494714	1.154206025	0.286042284	4.03508883	5.45816E-05	0.000375186	Myo10
ENSMUSG00000045790	314.6895128	1.135856859	0.281538848	4.034458709	5.47283E-05	0.000375976	Ccdc149
ENSMUSG00000028796	3299.16046	0.943867359	0.233975941	4.034035962	5.48269E-05	0.000376545	Phc2
ENSMUSG00000041324	51.94776108	2.881821315	0.715233934	4.029201045	5.59667E-05	0.000383597	Inhba
ENSMUSG00000018774	902.9513845	2.159439406	0.536036482	4.028530667	5.61265E-05	0.000384581	Cd68
ENSMUSG00000030879	1358.112	0.826373879	0.205198853	4.027185653	5.64485E-05	0.000386341	Mrpl17
ENSMUSG00000073652	5.474439918	3.38358231	0.840390302	4.026203421	5.66847E-05	0.000387846	Apol7d
ENSMUSG00000102705	83.5137626	1.048989636	0.260602415	4.025249094	5.6915E-05	0.000389266	NA
ENSMUSG00000062012	190.1120692	1.49844638	0.37237809	4.023991794	5.72199E-05	0.00039117	Zfp13
ENSMUSG00000029658	6.523275089	3.006216796	0.747304108	4.022748924	5.75228E-05	0.000392789	Wdr95
ENSMUSG00000000552	332.3646769	1.565358725	0.389380614	4.020124957	5.81673E-05	0.000397075	Zfp385a
ENSMUSG00000007656	2348.77512	0.691085929	0.171924832	4.019698152	5.82728E-05	0.000397681	Arpp19
ENSMUSG00000021831	3684.230847	1.214738391	0.302238083	4.019144045	5.841E-05	0.000398274	Ero1l
ENSMUSG00000033732	3741.600713	0.925497949	0.230265897	4.01925756	5.83818E-05	0.000398274	Sf3b3
ENSMUSG00000048240	135.3475817	1.374241669	0.34191823	4.01921146	5.83932E-05	0.000398274	Gng7
ENSMUSG00000024081	1088.649543	0.85573743	0.212936371	4.018747137	5.85084E-05	0.000398602	Cebpz
ENSMUSG000000071072	3696.342024	1.041023786	0.259115378	4.017607105	5.87921E-05	0.000400305	NA
ENSMUSG00000035842	235.6237083	1.264663313	0.314926245	4.015744424	5.92584E-05	0.000403365	Ddx11
ENSMUSG00000034064	662.2662888	0.951542379	0.236959293	4.015636475	5.92856E-05	0.000403434	Poglut1
ENSMUSG00000070867	145.8200863	2.022246997	0.503691315	4.014853817	5.94827E-05	0.000404419	Trabd2b
ENSMUSG00000078768	42.28469637	1.42502768	0.355107923	4.012942507	5.99665E-05	0.000407484	Zfp566
ENSMUSG00000085620	4.078701	3.966722545	0.988628953	4.012347133	6.0118E-05	0.000408397	NA

ENSMUSG00000070690	10.3985553	3.818077071	0.951668418	4.011982534	6.0211E-05	0.000408911	5830473C10Rik
ENSMUSG00000001380	1546.904633	0.881335762	0.219782244	4.010040779	6.07083E-05	0.000412053	Hars
ENSMUSG000000062939	108.6914612	1.864127506	0.464958622	4.009233118	6.09163E-05	0.000413229	Stat4
ENSMUSG000000020660	21.84230284	2.456881777	0.613270326	4.006197061	6.17042E-05	0.000418096	Pomc
ENSMUSG000000034793	1071.391251	0.82957343	0.207071822	4.006211099	6.17005E-05	0.000418096	G6pc3
ENSMUSG000000056054	3312.540433	2.613021759	0.65270229	4.003389903	6.24413E-05	0.000422729	S100a8
ENSMUSG000000034807	2731.013377	0.763722047	0.190781897	4.003115909	6.25137E-05	0.000423098	Colgalt1
ENSMUSG000000047434	452.0418272	1.057588975	0.264287207	4.001665409	6.28982E-05	0.000425337	Xxylt1
ENSMUSG000000076433	10.09403314	2.324403533	0.580857424	4.001676547	6.28952E-05	0.000425337	BC100451
ENSMUSG000000024680	9.369759648	3.330073723	0.832191152	4.001573096	6.29228E-05	0.000425382	Ms4a2
ENSMUSG000000086428	6.468614887	3.844985731	0.961283222	3.999846917	6.33835E-05	0.000428131	NA
ENSMUSG000000006476	1216.757107	0.99385681	0.24865559	3.996921238	6.41716E-05	0.000432717	Nsmf
ENSMUSG000000026585	482.3912314	0.689107043	0.172407457	3.996967728	6.4159E-05	0.000432717	Kifap3
ENSMUSG000000094978	12.40223249	3.338342051	0.835486122	3.995688217	6.45066E-05	0.000434729	Scgb1b20
ENSMUSG00000003808	1015.527352	0.795365778	0.199127486	3.994254094	6.48982E-05	0.000436996	Farsa
ENSMUSG000000034708	9296.066244	1.192203445	0.298574351	3.992986814	6.52462E-05	0.00043909	Grn
ENSMUSG000000020156	932.790686	0.795928673	0.199349603	3.992627328	6.53452E-05	0.000439575	Mum1
ENSMUSG000000036223	89.57371112	1.616981246	0.405267003	3.989915865	6.60967E-05	0.000444436	Ska1
ENSMUSG000000022177	584.8673762	1.120958616	0.2809655	3.989666398	6.61663E-05	0.000444778	Haus4
ENSMUSG000000032925	20.91490809	2.776732165	0.696078832	3.989105885	6.63228E-05	0.000445704	Itgbl1
ENSMUSG000000033192	581.0422064	1.6925195	0.424450081	3.987558432	6.67568E-05	0.000448494	Lpcat2
ENSMUSG000000023805	600.9255629	1.12580719	0.282399469	3.986576869	6.70334E-05	0.000450225	Synj2
ENSMUSG000000020178	137.9535049	1.483700493	0.37224998	3.985763796	6.72634E-05	0.000451595	Adora2a
ENSMUSG000000026921	670.6438747	1.001212933	0.251352507	3.983301959	6.79643E-05	0.000455833	Egfl7
ENSMUSG000000075012	53.73239564	1.439590982	0.361507977	3.982183167	6.82851E-05	0.000457597	Fjx1
ENSMUSG000000036160	607.3495959	0.702716754	0.176515897	3.981039473	6.86146E-05	0.000459545	Surf6
ENSMUSG000000031443	81.92310381	2.802986197	0.704607544	3.978081447	6.94736E-05	0.000464775	F7
ENSMUSG000000033423	858.5271221	0.637902825	0.160443719	3.975866598	7.01234E-05	0.000468858	Eri3
ENSMUSG000000017861	572.9246094	1.703605482	0.428535405	3.97541361	7.0257E-05	0.000469355	Mybl2
ENSMUSG000000022283	18440.31639	0.949547126	0.238866988	3.975212873	7.03163E-05	0.000469619	Pabpc1
ENSMUSG000000031609	418.8924765	0.910287943	0.229075347	3.973749054	7.07501E-05	0.00047225	Sap30
ENSMUSG000000006575	292.6060011	1.172957123	0.295235387	3.972955729	7.09862E-05	0.000473561	Rundc3a
ENSMUSG000000031903	405.6224087	1.741684529	0.438550639	3.971455915	7.14347E-05	0.000476151	Pla2g15
ENSMUSG000000079620	1092.730505	1.86197189	0.468848429	3.971372786	7.14597E-05	0.000476184	Muc4
ENSMUSG000000039096	340.1197673	0.969727398	0.244264512	3.969988879	7.1876E-05	0.000478481	Rsad1
ENSMUSG000000049489	399.1746281	0.992353839	0.249997267	3.969458755	7.20361E-05	0.000479218	Fam58b
ENSMUSG000000045598	471.3503887	0.794969912	0.200294063	3.969013863	7.21707E-05	0.000479845	Zfp553
ENSMUSG000000027430	301.5136233	1.04470065	0.26329588	3.967781987	7.25447E-05	0.000481927	Dtd1
ENSMUSG000000072812	270.2061003	1.759658887	0.443567264	3.967062116	7.2764E-05	0.000483249	NA
ENSMUSG000000037935	1755.812576	0.65369853	0.164824491	3.966027897	7.30803E-05	0.000485214	Smarce1
ENSMUSG000000090394	358.1257576	1.343465968	0.33875624	3.965878141	7.31262E-05	0.000485383	4930523C07Rik
ENSMUSG0000000097971	10225.94753	2.215731637	0.559001333	3.963732299	7.3787E-05	0.000489121	NA
ENSMUSG000000031796	834.1332151	0.710303258	0.179407239	3.959167214	7.52116E-05	0.000497557	Cfap20
ENSMUSG000000009687	1444.693331	1.942613125	0.490679192	3.959028951	7.52551E-05	0.000497568	Fxyd5
ENSMUSG000000031107	234.0687231	1.162901684	0.293779976	3.958410298	7.54503E-05	0.000498719	RbmX2
ENSMUSG000000003549	380.7237337	0.717505852	0.181292306	3.957729187	7.56657E-05	0.000500004	Ercc1
ENSMUSG000000079092	4.819566137	4.023445549	1.016969851	3.9563076	7.61171E-05	0.000502707	Pr12c2
ENSMUSG000000025464	341.1025049	1.136998363	0.287401963	3.956125942	7.6175E-05	0.00050295	Paox
ENSMUSG000000087259	526.0899678	1.266947832	0.320286978	3.955664516	7.63222E-05	0.000503782	2610035D17Rik
ENSMUSG000000051238	270.5460494	0.715932053	0.181020787	3.954971504	7.65438E-05	0.000504964	Swsap1
ENSMUSG000000070003	1136.069081	0.773191537	0.195544955	3.954034699	7.68443E-05	0.000506664	Ssbp4
ENSMUSG0000000062593	749.9365158	2.337543793	0.591379072	3.952699552	7.72744E-05	0.000509218	Lilrb4a
ENSMUSG000000020311	1721.912639	0.789562222	0.19984283	3.950915938	7.78527E-05	0.000512886	Erlec1
ENSMUSG000000040209	813.1936011	1.342047039	0.339695247	3.950738347	7.79105E-05	0.000513125	Zfp704
ENSMUSG000000019297	746.3753048	0.739464128	0.187191316	3.950312128	7.80493E-05	0.000513897	Nop9
ENSMUSG000000111259	35.59354175	2.374067713	0.601119822	3.949408461	7.83446E-05	0.000515698	NA
ENSMUSG000000035299	251.9763744	0.947566359	0.239956127	3.948915044	7.85062E-05	0.000516476	Mid1
ENSMUSG000000023013	6.180010066	3.804353254	0.963437499	3.948728651	7.85673E-05	0.000516735	Aqp2
ENSMUSG000000053030	6.24886218	2.942843341	0.745341575	3.948315026	7.87032E-05	0.000517327	Spink2
ENSMUSG000000049421	915.0540648	0.967736866	0.245247084	3.945966863	7.94786E-05	0.000522005	Zfp260
ENSMUSG000000020898	723.0446127	1.158440913	0.293680632	3.944560135	7.99466E-05	0.000524499	Ctc1
ENSMUSG000000003378	528.0552349	1.287155968	0.326590766	3.941189102	8.10787E-05	0.000531046	Grik5
ENSMUSG000000035131	55.85497799	2.880916334	0.730971886	3.941213593	8.10704E-05	0.000531046	Brnp3
ENSMUSG000000002814	331.386582	0.807036101	0.204775584	3.941075818	8.1117E-05	0.000531151	Top3a
ENSMUSG000000019122	1244.35853	1.610190681	0.40863185	3.940443411	8.13311E-05	0.000532406	Ccl9
ENSMUSG000000019988	365.2628825	0.805921999	0.204552291	3.939931417	8.15049E-05	0.000532971	Nedd1
ENSMUSG000000033706	538.702443	1.04400404	0.264986263	3.939842117	8.15353E-05	0.000533008	Smyd5

ENSMUSG00000023942	1308.119618	1.216449691	0.308766117	3.939712368	8.15794E-05	0.00053315	Slc29a1
ENSMUSG00000001497	11.96356092	3.25061454	0.825219259	3.939091948	8.17906E-05	0.000534236	Pax9
ENSMUSG000000051391	3357.798366	1.072786218	0.272389657	3.938424932	8.20182E-05	0.000535429	Ywhag
ENSMUSG00000028300	493.0203982	0.998107703	0.253489084	3.937478047	8.23425E-05	0.000537398	3110043O21Rik
ENSMUSG00000072589	7.294460709	3.055670134	0.776065931	3.937384717	8.23745E-05	0.000537459	Gm10371
ENSMUSG00000028364	6032.862233	1.984520538	0.504293674	3.93524773	8.31109E-05	0.000541966	Tnc
ENSMUSG00000029581	628.576623	1.916709187	0.487096189	3.934970607	8.32069E-05	0.000542313	Fscn1
ENSMUSG00000024790	230.9484312	0.858581678	0.218207359	3.934705426	8.32988E-05	0.000542744	Sac3d1
ENSMUSG00000042340	92.8448945	1.368936483	0.347970082	3.934063746	8.35216E-05	0.000543749	Ctf1
ENSMUSG00000102014	5.508763191	3.069130042	0.780131853	3.934117071	8.35031E-05	0.000543749	2900009J06Rik
ENSMUSG00000002017	951.644181	0.800461287	0.20352392	3.933008401	8.38893E-05	0.000545694	Fam98a
ENSMUSG00000026797	915.1593771	1.037293352	0.263764903	3.932643582	8.40168E-05	0.000546224	Stxbp1
ENSMUSG00000048581	74.78087835	1.069165512	0.271888318	3.932370167	8.41124E-05	0.000546696	E130311K13Rik
ENSMUSG00000026646	107.4760597	1.481971556	0.37698979	3.931065493	8.45702E-05	0.000549521	Suv39h2
ENSMUSG00000086591	8.584872927	2.95696546	0.752761506	3.928157109	8.55993E-05	0.000555448	NA
ENSMUSG00000111800	4.706793418	3.989028605	1.015482147	3.928211458	8.55799E-05	0.000555448	NA
ENSMUSG00000035640	225.4750973	1.109372574	0.282420829	3.928083418	8.56255E-05	0.000555467	Charp
ENSMUSG00000023110	1328.32722	0.904289845	0.230265984	3.92715341	8.59572E-05	0.000557466	Prmt5
ENSMUSG00000053528	5.82112606	3.389446684	0.863146272	3.926850862	8.60653E-05	0.000558015	A530021J07Rik
ENSMUSG00000041309	101.7540054	4.220584075	1.074918962	3.926420709	8.62193E-05	0.000558709	Nkx6-2
ENSMUSG00000027490	356.5470436	1.56544074	0.398844409	3.92494092	8.6751E-05	0.000561848	E2f1
ENSMUSG000000029430	207.8790225	2.656534041	0.676868681	3.924740671	8.68232E-05	0.000562162	Nlrp3
ENSMUSG00000024525	255.702897	1.065827437	0.271673769	3.923188612	8.73847E-05	0.000565489	Impa2
ENSMUSG00000003848	834.5251428	0.902124844	0.230023905	3.921874305	8.78628E-05	0.000568428	Nob1
ENSMUSG00000097772	155.9834377	1.000991296	0.255247457	3.921650413	8.79445E-05	0.000568802	5430416N02Rik
ENSMUSG00000040888	634.8143796	0.896324403	0.228565347	3.921523596	8.79908E-05	0.000568947	Gfer
ENSMUSG00000023973	1225.507109	0.808984661	0.206415384	3.919207205	8.88407E-05	0.000573505	Cnpy3
ENSMUSG00000068037	4.869543953	3.998305999	1.02047946	3.91806612	8.92622E-05	0.000575913	Mas1
ENSMUSG00000024962	446.227498	1.176698165	0.300446364	3.916499933	8.98438E-05	0.000579351	Vegfb
ENSMUSG00000033099	634.4029712	1.056521351	0.26979867	3.915962045	9.00444E-05	0.000580172	Nol12
ENSMUSG00000002068	261.7595519	1.833022168	0.468280187	3.914370535	9.06404E-05	0.000583379	Ccne1
ENSMUSG000000029430	6022.059703	1.16899822	0.298657084	3.914182126	9.07112E-05	0.000583677	NA
ENSMUSG00000044933	40.01750489	1.602583549	0.409465016	3.913847308	9.08371E-05	0.000584329	Sstr3
ENSMUSG00000023988	685.9955726	1.283960289	0.328106821	3.913238641	9.10665E-05	0.000585487	Bysl
ENSMUSG00000078963	40.80333709	1.755979096	0.448792641	3.912673555	9.12799E-05	0.000586701	Hsbp1l1
ENSMUSG00000026470	1089.521384	0.630779708	0.161234651	3.912184544	9.1465E-05	0.000587731	Stx6
ENSMUSG00000034300	973.8984986	0.912094737	0.233407518	3.907735039	9.31654E-05	0.000597688	Fam53c
ENSMUSG00000039781	237.2901593	1.600269215	0.409524176	3.907630634	9.32056E-05	0.000597784	Cep131
ENSMUSG00000057278	848.3802525	1.16029507	0.297014486	3.906526871	9.36322E-05	0.000600034	Snrpg
ENSMUSG00000027435	819.5005212	1.669817657	0.427664086	3.904507556	9.44174E-05	0.000604414	Cd93
ENSMUSG00000079038	75.58125288	0.92889374	0.23799069	3.903067546	9.49812E-05	0.000607859	D130040H23Rik
ENSMUSG000000024528	233.5733982	0.631948152	0.161934586	3.902490302	9.52081E-05	0.000609147	NA
ENSMUSG00000028069	610.9272193	0.82255976	0.210979962	3.898757742	9.66874E-05	0.000617614	Gpatch4
ENSMUSG00000024493	1487.799852	0.810028443	0.207793898	3.898230177	9.68983E-05	0.000618628	Lars
ENSMUSG00000044103	111.9799256	2.601164241	0.667395627	3.897484693	9.7197E-05	0.000620202	Il1f9
ENSMUSG00000031179	3.443525353	3.822364746	0.980824326	3.897094152	9.73538E-05	0.000621036	3830417A13Rik
ENSMUSG00000034573	382.7685289	1.08740155	0.279102883	3.896059902	9.77702E-05	0.000623357	Ptpn13
ENSMUSG00000038156	1560.070792	2.055947924	0.527731307	3.895823304	9.78657E-05	0.000623799	Spon1
ENSMUSG00000031578	823.7550589	0.957850264	0.245877554	3.895639307	9.79401E-05	0.000623948	Mak16
ENSMUSG00000026281	969.2264662	1.181391848	0.303373513	3.894182579	9.85304E-05	0.00062753	Dtymk
ENSMUSG00000040220	286.0237862	1.075659912	0.276300985	3.893073032	9.89823E-05	0.00063024	Gas8
ENSMUSG00000057322	6603.048902	0.937171284	0.240787273	3.892113033	9.93749E-05	0.000632062	Rpl38
ENSMUSG00000027938	832.2748979	1.945468367	0.499891876	3.891778324	9.95121E-05	0.000632596	Creb3l4
ENSMUSG00000042462	596.7759803	1.10878664	0.284934352	3.891375799	9.96774E-05	0.000633477	Dctpp1
ENSMUSG00000087001	19.6890707	3.141641055	0.807430091	3.89091401	9.98673E-05	0.000634514	NA
ENSMUSG00000062309	74.80437417	1.493715641	0.383911109	3.890785145	9.99204E-05	0.000634681	Rpp25
ENSMUSG00000029669	941.8535612	1.117754933	0.287352709	3.889836081	0.000100312	0.000636488	Tspan12
ENSMUSG00000026374	2269.751949	0.806549692	0.207419066	3.888503156	0.000100864	0.000639738	Tsn
ENSMUSG00000030512	945.0522139	1.076046023	0.276873862	3.88641245	0.000101737	0.000645011	Snrpa1
ENSMUSG00000073856	50.12577672	1.456897375	0.374996718	3.885093664	0.00010229	0.000647871	lqck
ENSMUSG00000048450	174.4723586	2.081094343	0.536112377	3.881824842	0.000103676	0.000655554	Msx1
ENSMUSG000000109916	12662.33152	2.18358894	0.563106388	3.87775558	0.000105425	0.000666258	NA
ENSMUSG00000017764	276.0832616	0.729287828	0.188096267	3.877205217	0.000105663	0.000667589	Zswim1
ENSMUSG00000020224	782.5462993	0.735620528	0.189741329	3.876965191	0.000105767	0.00066807	Llph
ENSMUSG00000025925	423.1053683	1.209568912	0.312051102	3.876188562	0.000106105	0.000669849	Terf1
ENSMUSG00000045545	84.37067998	2.798201281	0.722014922	3.875544947	0.000106386	0.000671265	Krt14
ENSMUSG00000103726	15.53969064	2.26953857	0.585665188	3.875146786	0.00010656	0.000672185	NA



ENSMUSG00000046865	1554.721667	1.130109069	0.291762056	3.873392879	0.000107331	0.000676505	NA
ENSMUSG00000018858	937.6631372	0.946706528	0.244423032	3.873229618	0.000107403	0.000676779	Mrpl58
ENSMUSG00000097875	22.65168591	1.604133134	0.414238943	3.872482679	0.000107732	0.000678677	NA
ENSMUSG00000009633	208.0451846	1.436016357	0.371005321	3.870608527	0.000108564	0.000683191	G0s2
ENSMUSG00000026211	195.5260399	2.05317299	0.530481892	3.870392224	0.00010866	0.000683617	Obsl1
ENSMUSG00000023353	1548.035742	0.930251709	0.240374584	3.870008604	0.000108832	0.000684512	Agap3
ENSMUSG00000037169	112.6660051	2.114288478	0.546358175	3.869784649	0.000108932	0.00068496	Mycn
ENSMUSG00000055978	746.1152426	2.4127103	0.623682805	3.868489369	0.000109512	0.000688243	Fut2
ENSMUSG00000034173	33.92369978	1.247102584	0.322558409	3.866284525	0.000110506	0.000694125	Zbed5
ENSMUSG00000071662	995.0734007	1.031041492	0.266726022	3.865545193	0.000110841	0.000696047	Polr2g
ENSMUSG00000036086	159.7414548	1.506402049	0.389769294	3.864855632	0.000111155	0.000697832	Zranb3
ENSMUSG00000027832	242.8665418	3.037380912	0.785912408	3.864782996	0.000111188	0.000697855	Ptx3
ENSMUSG00000100335	4.709209851	3.654489944	0.945664567	3.864467455	0.000111332	0.000698573	231008N11Rik
ENSMUSG00000025157	794.9202812	0.745801028	0.193054025	3.86317265	0.000111924	0.000701742	Zdhhc16
ENSMUSG00000097839	38.80783865	1.298064364	0.336057844	3.862621835	0.000112177	0.000702886	NA
ENSMUSG00000109957	16.39203981	3.217361438	0.832956944	3.862578327	0.000112197	0.000702886	NA
ENSMUSG00000020167	1835.890153	0.527770568	0.136662584	3.861851233	0.000112531	0.000704238	Tcf3
ENSMUSG00000049699	16.68100634	2.951222849	0.764380298	3.860935267	0.000112954	0.000706333	Ucn2
ENSMUSG00000085077	4.008116718	3.875288608	1.004132307	3.859340629	0.000113693	0.000710576	1700049E15Rik
ENSMUSG00000060459	50.25877503	2.824705147	0.732041018	3.858670587	0.000114005	0.000712339	Knq2
ENSMUSG00000002265	679.7585813	1.486807849	0.385438937	3.857440716	0.00011458	0.000715368	Peg3
ENSMUSG000000054693	4734.885144	0.763272471	0.197943247	3.856016719	0.00011525	0.000719356	Adam10
ENSMUSG00000042410	1408.545743	0.797718378	0.20688917	3.855776403	0.000115363	0.000719874	Agps
ENSMUSG00000023021	846.2634756	1.062169405	0.275606931	3.85392849	0.000116238	0.000724951	Cers5
ENSMUSG00000028601	1066.085612	1.369424946	0.355368218	3.853538033	0.000116423	0.000725918	Echdc2
ENSMUSG00000099553	4.367943833	3.91213619	1.015742783	3.851502817	0.000117395	0.000730828	NA
ENSMUSG00000038845	1688.622847	0.857011375	0.222559277	3.85071064	0.000117776	0.000732649	NA
ENSMUSG00000057134	698.8174109	0.756456064	0.196446317	3.850701173	0.00011778	0.000732649	Ado
ENSMUSG00000023885	3099.70812	2.509538301	0.652032788	3.848791572	0.000118702	0.000737224	Thbs2
ENSMUSG00000039963	21.84134242	2.164416673	0.562513251	3.84776122	0.000119202	0.000739944	Ccdc40
ENSMUSG00000041438	930.302256	1.016366068	0.264181442	3.847227342	0.000119462	0.000741171	Cirh1a
ENSMUSG0000000025145	1832.046071	1.856807156	0.482683681	3.846840549	0.000119651	0.000742147	Lrrc45
ENSMUSG00000070167	18.83972355	1.784717596	0.464105163	3.845502568	0.000120306	0.000746014	NA
ENSMUSG00000084839	33.21734552	1.517090929	0.394652001	3.844123242	0.000120984	0.000749637	NA
ENSMUSG00000087326	15.7320969	2.157616712	0.561276789	3.844122465	0.000120985	0.000749637	NA
ENSMUSG00000036968	448.0782562	1.279140348	0.332831184	3.843210634	0.000121435	0.000752233	Cnpy4
ENSMUSG00000015176	1782.184412	1.013686637	0.263918729	3.840904516	0.000122582	0.000758545	Nolc1
ENSMUSG00000042050	217.1873592	0.803010847	0.209248174	3.837600257	0.000124243	0.000767821	Wdr60
ENSMUSG00000028542	1064.816653	1.569635753	0.409087993	3.836914745	0.00012459	0.000769567	Slc6a9
ENSMUSG00000022683	349.3578002	1.696970881	0.442300249	3.836694385	0.000124701	0.000769837	Pla2g10
ENSMUSG00000027223	371.0701273	1.253830454	0.326804581	3.836636718	0.000124731	0.000769837	Mapk8ip1
ENSMUSG000000000378	838.6383945	1.051550108	0.274213286	3.83478905	0.000125672	0.000775446	Ccm2
ENSMUSG00000030826	1127.013477	1.002527103	0.261439933	3.834636472	0.00012575	0.000775524	Bcat2
ENSMUSG00000033720	169.6343422	1.334729562	0.348094282	3.834390946	0.000125876	0.000776098	Sfxn5
ENSMUSG00000074874	321.1989355	2.46345422	0.643213228	3.829918466	0.000128186	0.000789725	Ctla2b
ENSMUSG00000013629	995.0888574	1.462726753	0.38194355	3.82969356	0.000128303	0.000790242	Cad
ENSMUSG00000020413	220.2330947	0.879574036	0.22974232	3.828524222	0.000128914	0.000793594	Hus1
ENSMUSG00000022864	127.8493796	1.582448939	0.413387853	3.828000574	0.000129188	0.000794872	D16Ertd472e
ENSMUSG00000021363	4.416642402	3.571788278	0.933320229	3.826969742	0.00012973	0.000798	Mak
ENSMUSG00000023034	1191.777432	1.581187272	0.413191429	3.826766868	0.000129837	0.000798451	Nr4a1
ENSMUSG00000035352	38.72588843	2.272086811	0.593946011	3.825409663	0.000130555	0.000802033	NA
ENSMUSG00000024208	977.3227761	1.220648153	0.319268409	3.823266309	0.000131695	0.000807786	Uqc2
ENSMUSG00000047810	938.5628931	1.703642653	0.445671085	3.822645691	0.000132027	0.000809236	Ccdc88b
ENSMUSG00000041360	1200.187239	0.946753396	0.247731789	3.821687154	0.000132542	0.000812139	Pum3
ENSMUSG00000095493	10.0494749	2.853926476	0.746869175	3.821186588	0.000132811	0.00081316	A630023A22Rik
ENSMUSG00000022828	320.2934103	0.907242204	0.237551039	3.819146436	0.000133914	0.000819281	Gtf2e1
ENSMUSG00000052369	590.0928758	1.079430972	0.282709223	3.818166807	0.000134447	0.000821905	Tmem106c
ENSMUSG00000109956	9.494139993	2.17430559	0.569509627	3.817855723	0.000134617	0.000822307	NA
ENSMUSG00000110569	4.402136703	3.557212286	0.931759249	3.817737564	0.000134681	0.000822489	NA
ENSMUSG00000055994	107.9311822	1.16691664	0.305818499	3.815716329	0.000135788	0.0008284	Nod2
ENSMUSG00000024173	7.603108427	2.685621528	0.704100237	3.814260223	0.000136591	0.000832658	Tpsab1
ENSMUSG00000073423	253.6314232	0.702040619	0.184112838	3.813099765	0.000137235	0.00083615	Zfp414
ENSMUSG00000031671	363.9893186	0.713871875	0.187234388	3.812717753	0.000137447	0.000837229	Setd6
ENSMUSG00000056305	821.6632324	0.854757247	0.224232944	3.811916439	0.000137893	0.000839518	Usp39
ENSMUSG00000099061	7.040875262	2.776112722	0.728745526	3.809440501	0.000139282	0.000847317	NA
ENSMUSG00000024936	12.59239668	2.401628946	0.630851171	3.806965982	0.000140682	0.000855399	Kcnk7
ENSMUSG00000030352	1000.964814	1.226241324	0.322187337	3.805988581	0.000141239	0.000858345	Tspan9



ENSMUSG00000029276	189.2528452	1.213134905	0.318750985	3.805901662	0.000141289	0.000858427	Glmn
ENSMUSG00000023960	979.6537955	0.83325029	0.218940776	3.805825052	0.000141332	0.000858473	Ennp5
ENSMUSG00000017765	589.1773359	1.449131866	0.380960212	3.80389295	0.00014244	0.000864979	Slc12a4
ENSMUSG00000057147	347.5307489	1.13410389	0.298309891	3.80176429	0.000143669	0.000872	Dph6
ENSMUSG00000030386	246.1159059	0.661567197	0.174049079	3.801038203	0.000144091	0.000874337	Zfp606
ENSMUSG00000031585	652.1536035	0.802970921	0.211331504	3.799579834	0.000144942	0.000878716	Gtf2e2
ENSMUSG00000042197	571.2643569	0.701396163	0.1845967	3.799613762	0.000144922	0.000878716	Zfp451
ENSMUSG00000030145	41.22966208	1.236897828	0.325662326	3.79809923	0.00014581	0.000882962	Zfp248
ENSMUSG00000032724	195.8325462	1.55936435	0.410672211	3.797102185	0.000146397	0.000886294	Abtb2
ENSMUSG00000032294	25990.14808	0.897903144	0.236499393	3.79664038	0.00014667	0.000887494	Pkm
ENSMUSG00000019718	72.99759712	1.08938746	0.287034678	3.795316537	0.000147455	0.000892016	L3hypdh
ENSMUSG00000056643	13.1642275	2.544985755	0.671196152	3.791716846	0.000149609	0.000904127	Chst13
ENSMUSG00000001014	9.164383247	2.358453025	0.622115933	3.791018521	0.000150031	0.000906212	Icam4
ENSMUSG00000024011	193.1093711	2.302048281	0.607331813	3.790429269	0.000150387	0.000907732	Pi16
ENSMUSG00000085894	88.66548557	1.871592512	0.493770102	3.790412791	0.000150397	0.000907732	NA
ENSMUSG00000031984	727.7724438	0.959739225	0.2532343	3.789925869	0.000150692	0.000909166	2810004N23Rik
ENSMUSG00000029306	7.713001732	3.267359982	0.862547723	3.788033863	0.000151844	0.000914607	Ibsp
ENSMUSG00000036555	412.7144645	1.108578	0.29267179	3.787785629	0.000151996	0.000915289	Iqce
ENSMUSG00000087612	30.85952926	2.896722339	0.764797664	3.787566926	0.00015213	0.000915863	NA
ENSMUSG00000025856	2174.992742	1.158167588	0.305803673	3.787291286	0.000152299	0.000916646	Pdgfa
ENSMUSG00000092216	11.93142114	1.818626969	0.48035548	3.786002338	0.00015309	0.000920712	Gm19345
ENSMUSG00000022685	887.3150111	0.969243242	0.25605594	3.785279274	0.000153536	0.000922459	Parn
ENSMUSG00000038503	1033.716712	0.863432288	0.228110764	3.785144868	0.000153619	0.000922724	Mesdc2
ENSMUSG00000035941	2100.815761	0.844047884	0.223039594	3.784296187	0.000154144	0.000925177	Ibtk
ENSMUSG00000002020	1244.282186	1.728086332	0.45667463	3.784064666	0.000154288	0.000925804	Ltbp2
ENSMUSG00000022364	138.5712647	1.347588169	0.356334133	3.781810509	0.000155692	0.000933051	Tbc1d31
ENSMUSG00000059897	329.4026508	0.80307677	0.212476301	3.779606316	0.000157077	0.000940875	Zfp930
ENSMUSG00000005161	5124.574643	1.105159973	0.292435375	3.779159666	0.000157359	0.000942089	Prdx2
ENSMUSG00000039001	10165.44922	1.032103598	0.273160356	3.778379903	0.000157852	0.000944805	Rps21
ENSMUSG00000039478	123.2630386	0.9295932	0.246069524	3.77776649	0.000158241	0.000946657	Micu3
ENSMUSG00000047181	290.816555	1.230984094	0.325858557	3.777663854	0.000158306	0.000946809	Samd14
ENSMUSG000000064899	9.894203976	3.163457572	0.837915666	3.775388978	0.000159758	0.000954531	Snord118
ENSMUSG00000097730	7.959470556	2.586718311	0.685179077	3.775244166	0.000159851	0.000954846	NA
ENSMUSG00000054967	21.07465402	1.958280606	0.518762577	3.774907237	0.000160067	0.000955656	Zfp647
ENSMUSG00000087273	74.48852487	1.866151311	0.494354876	3.774922434	0.000160057	0.000955656	NA
ENSMUSG00000031398	132.3231179	1.560730623	0.413575012	3.773754646	0.000160809	0.000959361	Plxna3
ENSMUSG00000023106	1495.22236	0.964828291	0.255765121	3.772321598	0.000161736	0.000964648	Denr
ENSMUSG00000051985	11.47570911	3.192299545	0.846458993	3.771357588	0.000162362	0.000968139	Igfn1
ENSMUSG00000025324	214.3702724	1.762338229	0.467376886	3.770700441	0.00016279	0.000970151	Atp10a
ENSMUSG00000059277	36.55252008	1.447789345	0.384158571	3.768728471	0.000164081	0.000977411	R74862
ENSMUSG00000041057	1692.24523	1.092775291	0.290025569	3.767858452	0.000164654	0.000980331	Wdr43
ENSMUSG000000066975	17.06240376	2.327045417	0.617678363	3.767406398	0.000164952	0.000981861	Cryba4
ENSMUSG00000061979	825.1889168	0.953712108	0.253358017	3.764286287	0.000167025	0.000992957	Wbscr16
ENSMUSG00000048200	1186.373575	1.170062816	0.310885991	3.763639569	0.000167458	0.000994783	Cracr2b
ENSMUSG00000014444	983.1190156	1.233975122	0.328152256	3.760373728	0.00016966	0.0010061	Piezo1
ENSMUSG00000031672	2134.939536	0.718797915	0.19119653	3.759471547	0.000170273	0.001008727	Got2
ENSMUSG00000037161	29.01232638	1.822842191	0.484994169	3.758482693	0.000170947	0.001012217	Mgarp
ENSMUSG00000018893	8.249357824	2.55008799	0.678553025	3.758126332	0.00017119	0.001013407	Mb
ENSMUSG00000020475	12.54129579	1.941790774	0.516756033	3.757654772	0.000171513	0.001015065	Pgam2
ENSMUSG00000028651	918.3940882	1.073192247	0.285672313	3.756724748	0.000172152	0.001018589	Ppie
ENSMUSG00000003779	488.766512	1.465938969	0.390226127	3.756639718	0.00017221	0.001018681	Kif20a
ENSMUSG00000063889	308.3326236	1.070178432	0.285068013	3.754116146	0.000173954	0.001027974	Crem
ENSMUSG00000025491	3067.505436	1.767049667	0.470838457	3.752985004	0.000174741	0.001032351	Ifitm1
ENSMUSG00000026890	89.34433427	2.103116602	0.560393696	3.752926945	0.000174782	0.001032351	Lhx6
ENSMUSG00000022390	1642.155591	0.824786229	0.219861147	3.751396001	0.000175853	0.001037644	Zc3h7b
ENSMUSG00000041215	640.4852962	1.076970231	0.287142799	3.75064335	0.000176381	0.001040376	Yeats2
ENSMUSG00000054457	9.580405629	3.618980025	0.965129429	3.74973544	0.000177021	0.001043503	NA
ENSMUSG00000031828	168.7827263	1.045301033	0.278926798	3.747581948	0.000178548	0.001051717	Klhl36
ENSMUSG00000046768	952.1483575	0.972756722	0.259620259	3.746844426	0.000179073	0.001054551	Rhoj
ENSMUSG00000078235	15.67430417	3.09273518	0.825586788	3.746105467	0.000179601	0.001056613	Fam43b
ENSMUSG00000026196	142.7596182	1.40894664	0.376198892	3.74521741	0.000180238	0.001060095	Bard1
ENSMUSG00000032816	268.0474189	1.575746293	0.420751088	3.745079544	0.000180337	0.001060415	Igdc4
ENSMUSG00000090386	42.59015526	1.311598883	0.350232746	3.744935043	0.00018044	0.001060548	Mir99ahg
ENSMUSG00000042514	32.00202725	3.195325469	0.853281622	3.744748963	0.000180574	0.001061024	Klhl14
ENSMUSG00000017830	248.4521925	1.336380589	0.357126776	3.742034146	0.000182537	0.00107176	Dhx58
ENSMUSG00000050912	1673.685699	1.008472868	0.269506214	3.741928076	0.000182614	0.001071879	Tmem123
ENSMUSG00000029375	12.4264257	2.690378238	0.719192845	3.740830093	0.000183413	0.00107611	Cxcl15

ENSMUSG00000029614	12686.06589	0.66671338	0.178285263	3.73958771	0.000184322	0.001080642	Rpl6
ENSMUSG00000007950	454.7651076	1.54744667	0.413855529	3.739098697	0.000184681	0.001082479	Abhd8
ENSMUSG000000053094	2184.500558	0.771427494	0.206366869	3.738136351	0.000185389	0.001085826	Tmem248
ENSMUSG000000064326	331.2901026	1.272552993	0.340449453	3.737861762	0.000185592	0.001086477	Siva1
ENSMUSG000000085347	24.50358542	1.757916158	0.470613994	3.735367374	0.000187441	0.001095953	NA
ENSMUSG000000031384	3.838502326	3.791987098	1.015475669	3.734197886	0.000188314	0.001099975	Asb9
ENSMUSG000000063888	1961.347569	0.811600823	0.217347177	3.734121752	0.000188371	0.001100037	Rpl7l1
ENSMUSG000000100843	5.685344175	3.701147639	0.991365481	3.733383608	0.000188925	0.001102725	NA
ENSMUSG000000048482	26.24901628	1.866199611	0.49995007	3.732771973	0.000189384	0.001104864	Bdnf
ENSMUSG000000026546	78.76787755	1.340716888	0.359305449	3.731412623	0.000190409	0.001109754	Cfap45
ENSMUSG000000035451	1239.379346	1.435330301	0.384807803	3.729992714	0.000191485	0.001115479	Foxa1
ENSMUSG000000033970	662.9210874	1.224268542	0.328307392	3.729031299	0.000192217	0.001119469	Rfc3
ENSMUSG000000021256	36.95437068	1.572051945	0.42158586	3.728901022	0.000192317	0.001119499	NA
ENSMUSG000000018378	864.6314396	1.171039444	0.314140831	3.727753063	0.000193195	0.001123783	NA
ENSMUSG000000029469	231.7602351	1.093005358	0.293323748	3.726276398	0.000194329	0.001129554	Ift81
ENSMUSG000000039244	803.8821558	0.760053006	0.204051626	3.724807407	0.000195464	0.001135318	E130309D02Rik
ENSMUSG000000038628	931.7719733	1.012570768	0.271865159	3.724533044	0.000195677	0.001135998	Polr3k
ENSMUSG000000047747	452.2147157	1.47428834	0.395826731	3.724580041	0.000195641	0.001135998	Rnf150
ENSMUSG000000058656	15.95546039	1.734310435	0.465676585	3.724280947	0.000195873	0.001136578	Samd12
ENSMUSG000000039989	591.9743162	1.259475469	0.338201408	3.724039701	0.00019606	0.001137388	Cbx4
ENSMUSG000000024604	1385.475292	0.710356559	0.190782435	3.723385543	0.000196569	0.001140062	Rbm22
ENSMUSG000000071708	597.4933349	0.941723738	0.2529519	3.722936005	0.000196919	0.001141816	NA
ENSMUSG000000051225	32.97494091	2.422985988	0.651175053	3.720944124	0.000198479	0.001149458	Fam83a
ENSMUSG000000035692	407.9158333	2.006984115	0.539456309	3.720383063	0.000198921	0.001151173	Isg15
ENSMUSG000000024085	4825.585834	0.972853164	0.26157963	3.719147262	0.000199896	0.001156537	Man2a1
ENSMUSG000000021939	23549.11471	0.752111369	0.202241653	3.718874702	0.000200112	0.001157285	Ctsb
ENSMUSG000000036030	18.96328136	2.136127555	0.574412075	3.718806842	0.000200166	0.001157285	Prtg
ENSMUSG000000089235	23.40948734	2.627401025	0.7065186	3.718799515	0.000200172	0.001157285	NA
ENSMUSG000000033170	1042.08634	1.142471258	0.307248293	3.718397411	0.000200491	0.001158846	Card10
ENSMUSG000000023873	52.10249637	1.425045423	0.383729583	3.713670999	0.000204274	0.001179568	1700010I14Rik
ENSMUSG000000005846	2604.119801	1.11594119	0.300550655	3.712988711	0.000204826	0.001182179	Rsl1d1
ENSMUSG0000000031480	128.1744829	1.070988914	0.28853971	3.711755699	0.000205827	0.001187665	Thsd1
ENSMUSG000000015943	373.6867964	1.076723755	0.290098145	3.711584423	0.000205966	0.00118818	Bola1
ENSMUSG000000030199	1793.882561	0.856924258	0.231030062	3.709146127	0.000207959	0.001197354	Etv6
ENSMUSG000000058486	312.5569382	1.350814411	0.364191971	3.709072463	0.00020802	0.001197412	Wdr91
ENSMUSG000000026377	1212.289271	0.966155768	0.260537399	3.708318926	0.00020864	0.001200404	Nifk
ENSMUSG000000036596	105.6687178	2.58501842	0.697086516	3.708317921	0.000208641	0.001200404	Cpz
ENSMUSG000000038214	312.9815008	0.934164026	0.251949082	3.707749271	0.00020911	0.00120281	Bend3
ENSMUSG000000040857	1419.536995	0.946436738	0.255277075	3.707488176	0.000209325	0.001203759	Erf
ENSMUSG000000037469	4.473395273	3.847083306	1.037675258	3.707405834	0.000209393	0.001203859	Acp7
ENSMUSG000000036678	516.5776047	1.210982008	0.326865466	3.704833128	0.00021153	0.00121438	Aaas
ENSMUSG0000000033319	1288.917376	0.719615349	0.194356526	3.702553053	0.000213441	0.001224462	Fem1c
ENSMUSG000000036902	100.9084845	1.210591958	0.327079751	3.7012134	0.000214571	0.001229758	Neto2
ENSMUSG000000025328	15.52872357	3.053159811	0.825073326	3.700470872	0.0002152	0.001232817	Padi3
ENSMUSG000000028898	771.2193316	1.121184953	0.302989304	3.700410992	0.000215251	0.001232817	Trnau1ap
ENSMUSG000000047963	218.1939965	1.265120607	0.341891395	3.700358144	0.000215295	0.001232817	Stbd1
ENSMUSG000000090533	9.966539603	2.388018431	0.645351379	3.700338308	0.000215312	0.001232817	NA
ENSMUSG000000036693	824.6072208	0.808049571	0.218379331	3.700210849	0.00021542	0.001233139	Nop14
ENSMUSG000000033933	686.2670317	0.583168386	0.157623861	3.699746873	0.000215815	0.001235098	Vhl
ENSMUSG000000021131	739.2478663	1.258788162	0.340275011	3.699325901	0.000216173	0.001236553	Erh
ENSMUSG000000033857	1582.50081	1.322244794	0.357456378	3.699038192	0.000216418	0.001237657	Engase
ENSMUSG000000025511	972.4868696	1.333436271	0.360631948	3.697499006	0.000217734	0.001243878	Tspan4
ENSMUSG000000046718	1144.497268	1.824089187	0.493335758	3.697459912	0.000217768	0.001243878	Bst2
ENSMUSG000000031967	1403.914148	0.726694885	0.196555214	3.697153941	0.00021803	0.001245078	Afg3l1
ENSMUSG000000085081	13.01071977	2.306001931	0.624094685	3.694955248	0.000219926	0.001254093	Rptoros
ENSMUSG000000020462	432.2743473	0.590502755	0.159827216	3.694632043	0.000220205	0.001254396	Cfap36
ENSMUSG000000053128	139.5384416	1.061431549	0.287293533	3.694589076	0.000220243	0.001254396	Rnf26
ENSMUSG000000061132	1247.357755	0.919059812	0.248746536	3.694764266	0.000220091	0.001254396	Blnk
ENSMUSG000000097868	79.38196865	1.243282662	0.336509587	3.694642622	0.000220196	0.001254396	A330069E16Rik
ENSMUSG000000018395	319.5958174	1.127895271	0.305319203	3.6941511	0.000220623	0.001256258	Kif3a
ENSMUSG000000043251	38.70040737	1.446827457	0.391828671	3.69250023	0.000222206	0.001263535	Exoc3l
ENSMUSG0000000110803	71.63394556	1.936258634	0.524467561	3.691855854	0.000222624	0.001266135	NA
ENSMUSG000000061032	3961.949783	0.548880024	0.148680387	3.691677385	0.00022278	0.001266721	Rrp1
ENSMUSG000000019945	62.99952124	1.775659921	0.481229232	3.689842183	0.000224393	0.001275284	1700040L02Rik
ENSMUSG000000086443	64.75888452	2.197746391	0.595959935	3.687741848	0.000226253	0.001284653	NA
ENSMUSG000000028825	7.955318407	2.6466661	0.717953315	3.686404179	0.000227445	0.001290907	Rhd
ENSMUSG000000020738	3232.235085	0.780249573	0.211673075	3.686106858	0.000227711	0.001291974	Sumo2

ENSMUSG00000024143	1322.620314	0.920825095	0.249929798	3.684334973	0.000229301	0.001299133	Rhoq
ENSMUSG00000066149	907.1136203	0.837619226	0.227400128	3.683459789	0.00023009	0.001302982	Cdc26
ENSMUSG00000037242	3783.026349	0.558805202	0.151733803	3.682799697	0.000230686	0.001305961	Clic4
ENSMUSG00000069255	115.6582314	1.133663615	0.307864938	3.682340773	0.000231102	0.00130753	Dusp22
ENSMUSG00000026981	1515.251449	2.237789604	0.607917043	3.681077264	0.000232251	0.001313654	Il1rn
ENSMUSG00000110666	5.601702742	3.620397802	0.983596551	3.680775209	0.000232526	0.001314898	NA
ENSMUSG00000024454	2571.438335	0.85295868	0.23175937	3.680363299	0.000232902	0.00131671	Hdac3
ENSMUSG00000029920	631.5306671	0.780628555	0.212115384	3.680207154	0.000233045	0.001317204	Smarcad1
ENSMUSG00000020260	931.7293678	0.646959316	0.175842719	3.679193092	0.000233973	0.001321823	Pofut2
ENSMUSG00000035704	477.8477727	1.281008716	0.348581909	3.674914517	0.000237929	0.001342894	Alg8
ENSMUSG00000002257	317.0896611	2.144446882	0.583719005	3.673765738	0.000239002	0.001348309	Def6
ENSMUSG00000025236	581.8949672	0.724153148	0.197185395	3.672448198	0.000240238	0.001353674	Adpgk
ENSMUSG00000032481	1838.316083	0.840960148	0.229107259	3.670595828	0.000241986	0.0013632	Smarcc1
ENSMUSG00000024098	1943.052695	0.899985921	0.245194391	3.670499629	0.000242077	0.00136339	Twsg1
ENSMUSG00000028345	614.5753886	0.796297916	0.217142611	3.667165607	0.000245254	0.001379975	Tex10
ENSMUSG00000069135	588.0142704	0.934781652	0.254954787	3.666460482	0.000245931	0.001383128	Fgfr1op
ENSMUSG00000032834	573.6899737	0.795446602	0.216981472	3.665965557	0.000246407	0.001385479	Pwp2
ENSMUSG00000047501	10095.63021	1.364937329	0.372410303	3.665143847	0.0002472	0.001389606	Cldn4
ENSMUSG00000036285	519.6407319	0.846568677	0.231065075	3.663767338	0.000248533	0.001395778	Noa1
ENSMUSG00000087411	7.489855912	2.807448652	0.766410072	3.663115549	0.000249166	0.001398344	NA
ENSMUSG00000040990	794.3503865	1.794472607	0.489942432	3.662619302	0.000249649	0.001400725	Sh3kbp1
ENSMUSG00000020325	341.7585646	1.401184655	0.382579069	3.662470765	0.000249794	0.001401207	Fstl3
ENSMUSG00000046034	744.6762554	0.693418093	0.189355918	3.661982676	0.000250271	0.001403549	Otulin
ENSMUSG00000049971	188.9774424	1.308744751	0.357718237	3.658591081	0.000253606	0.001421244	Glt1d1
ENSMUSG00000024803	61.8443767	2.837852605	0.775740335	3.658250675	0.000253943	0.001422797	Ankrd1
ENSMUSG00000070331	11.05664609	2.322210957	0.635154977	3.656132819	0.000256049	0.001433583	Qrich2
ENSMUSG00000068270	93.39963855	1.20654588	0.330040341	3.65575274	0.000256428	0.001435371	Shroom4
ENSMUSG00000032783	146.1818454	1.450264758	0.396782939	3.655058261	0.000257124	0.001438923	Troap
ENSMUSG00000053297	56.63484516	1.627903957	0.44544463	3.654559615	0.000257624	0.001441043	Al854703
ENSMUSG00000071362	141.1358401	1.215234592	0.332539888	3.654402481	0.000257782	0.001441587	NA
ENSMUSG00000019777	1548.487034	0.946986653	0.259516849	3.649037269	0.000263225	0.001469951	Hdac2
ENSMUSG000000016194	835.4721307	1.776264521	0.48684503	3.64852142	0.000263754	0.001472559	Hsd11b1
ENSMUSG00000032058	731.3717864	0.958468867	0.262740889	3.647962332	0.000264328	0.001474726	Ppp2r1b
ENSMUSG00000049300	498.3243444	1.259454173	0.345244552	3.648005927	0.000264284	0.001474726	Prmt6
ENSMUSG00000056481	272.597361	1.850745771	0.507355824	3.647826007	0.000264469	0.001475162	Cd248
ENSMUSG00000042523	154.5012545	0.979447936	0.268534365	3.647383956	0.000264924	0.001477008	Dnal1
ENSMUSG00000022875	7.80357841	3.241400016	0.889036145	3.645971017	0.000266384	0.001484104	Kng1
ENSMUSG000000061981	1380.946861	0.866290089	0.237598895	3.646019014	0.000266334	0.001484104	Flot2
ENSMUSG00000033020	1549.94018	1.301791935	0.35715001	3.644944416	0.00026745	0.001489691	Polr2f
ENSMUSG00000031561	176.9757323	1.56639384	0.429765597	3.644763216	0.000267638	0.001490392	Tenm3
ENSMUSG00000031996	10152.10534	0.849029317	0.23302393	3.643528444	0.000268926	0.001496861	Aplp2
ENSMUSG000000029177	740.2240877	1.407983966	0.386570436	3.642244299	0.000270271	0.001503646	Cenpa
ENSMUSG00000003812	511.0055251	1.374699708	0.377512788	3.641465274	0.000271091	0.001507445	NA
ENSMUSG00000030109	10.01255532	3.042965255	0.835701311	3.641211536	0.000271358	0.001507878	Slc6a12
ENSMUSG00000013584	417.0022944	1.215208756	0.333868572	3.639781815	0.000272869	0.001515259	Aldh1a2
ENSMUSG00000071454	479.9273262	1.066135943	0.292964538	3.639129666	0.000273561	0.001518392	Dtnb
ENSMUSG000000067148	1034.808356	0.651731987	0.179147336	3.637966383	0.000274799	0.001524196	Polr1c
ENSMUSG000000050605	124.1310164	1.034616004	0.284442446	3.637347448	0.00027546	0.001527149	Zfp61
ENSMUSG00000027469	723.4084019	1.384829467	0.380965365	3.635053453	0.000277923	0.001539366	Tpx2
ENSMUSG00000039994	358.9265427	1.190326008	0.327482811	3.634774005	0.000278224	0.001540146	Timeless
ENSMUSG00000063802	925.7284473	0.935905069	0.257618128	3.632916196	0.000280236	0.001549287	Hspbp1
ENSMUSG000000100215	17.78874487	1.517972499	0.418062432	3.630970837	0.000282357	0.001560287	NA
ENSMUSG000000041429	105.4817627	1.534689211	0.422719696	3.630512664	0.000282859	0.00156197	Nthl1
ENSMUSG00000039067	2476.23477	0.616157327	0.169794495	3.628841592	0.000284696	0.001570289	Psmd7
ENSMUSG00000089832	1192.983003	0.674727731	0.18598552	3.627850866	0.00028579	0.001575228	Shkbp1
ENSMUSG00000074129	694.2420402	1.098503019	0.302958715	3.625916554	0.000287938	0.001585964	Rpl13a
ENSMUSG000000051341	114.5446923	1.428243172	0.393917637	3.625740603	0.000288134	0.001586677	Zfp52
ENSMUSG000000027935	316.8728767	1.104037963	0.304832171	3.621789516	0.000292572	0.001609248	Rab13
ENSMUSG00000025209	583.8145525	0.978614178	0.270209087	3.62169233	0.000292682	0.00160948	Peo1
ENSMUSG00000044006	9.788307365	3.197694515	0.88305447	3.621174712	0.000293268	0.001612331	Cilp2
ENSMUSG00000026974	633.0346551	1.180489086	0.326150315	3.61946327	0.000295215	0.001621906	Zmynd19
ENSMUSG000000020492	240.9787227	1.396600859	0.38589042	3.619164366	0.000295556	0.001623029	Ska2
ENSMUSG00000026755	1394.169867	0.601630892	0.166302915	3.61768097	0.000297254	0.00163198	Arpc5l
ENSMUSG00000019987	2504.702236	2.894446429	0.800181796	3.617236035	0.000297766	0.001634409	Arg1
ENSMUSG000000051890	68.08523365	0.969878259	0.268254319	3.615517781	0.000299748	0.001644149	Klhdc1
ENSMUSG000000051234	1596.747309	0.791530184	0.218950496	3.615110255	0.00030022	0.001646358	Rnf7
ENSMUSG000000021732	68.00573832	2.055440517	0.5686212	3.614779957	0.000300603	0.001648078	Fgf10

ENSMUSG00000021257	141.8821184	1.169445337	0.323712309	3.612606949	0.000303134	0.001660422	Angel1
ENSMUSG00000060510	861.810937	0.752352799	0.208401856	3.61010605	0.000306072	0.00167497	Zfp266
ENSMUSG00000107272	11.53524002	3.121296703	0.865012893	3.60838171	0.000308113	0.001685751	NA
ENSMUSG00000020181	30.55762658	1.841534045	0.510421139	3.607871822	0.000308719	0.001688678	Nav3
ENSMUSG00000045896	843.2183324	0.738291658	0.204674249	3.60715459	0.000309573	0.001692182	Paip2b
ENSMUSG00000007050	598.2487691	1.159355594	0.321411634	3.607074136	0.000309669	0.001692317	Lsm2
ENSMUSG00000014980	211.4726539	1.014851945	0.281463375	3.605626998	0.0003114	0.001700537	Tsen15
ENSMUSG00000019738	571.9689671	0.83608588	0.231886817	3.605577451	0.00031146	0.001700537	Polr2i
ENSMUSG00000039236	200.4998779	1.04447485	0.28969584	3.605418877	0.00031165	0.001701184	Isg20
ENSMUSG00000090290	222.4999808	0.78965164	0.21919116	3.602570645	0.000315086	0.001719149	Tarbp1
ENSMUSG00000021091	6757.303261	2.143144475	0.595362703	3.599729147	0.000318549	0.001736449	Serpina3n
ENSMUSG00000045287	338.0817042	1.655693729	0.460019411	3.599182317	0.000319219	0.001739705	Rtn4rl1
ENSMUSG00000070436	2429.136014	1.541380368	0.428424586	3.597786913	0.000320936	0.00174786	Serpinh1
ENSMUSG00000024982	1267.84745	0.61939593	0.172294754	3.594978462	0.000324418	0.001764801	Zdhhc6
ENSMUSG00000078234	174.4055157	1.25256729	0.348522958	3.593930508	0.000325727	0.001771107	Klhdc7a
ENSMUSG00000022844	1211.037733	1.727867934	0.480815505	3.593619418	0.000326116	0.001772818	Pdia5
ENSMUSG00000039257	15.18162267	2.856028749	0.795142751	3.591844036	0.000328346	0.001784533	Vstm2b
ENSMUSG00000030060	546.4659289	0.916229035	0.255230837	3.589805395	0.000330925	0.001796903	Hmces
ENSMUSG00000027994	160.902364	1.691252332	0.471168281	3.589486819	0.00033133	0.00179869	Ccdc109b
ENSMUSG00000058046	19.18467446	1.531385021	0.426646361	3.589354461	0.000331498	0.001799192	49334301I7Rik
ENSMUSG00000033788	480.7336987	1.121924883	0.312583283	3.589203086	0.00033169	0.001799415	Dysf
ENSMUSG00000063856	7511.485616	0.773613193	0.21557668	3.588575507	0.00033249	0.001802927	Gpx1
ENSMUSG00000070348	3433.618572	1.656150661	0.461547192	3.588258553	0.000332894	0.001804297	Ccnd1
ENSMUSG00000070394	1326.351152	1.156644203	0.322388721	3.5877316	0.000333567	0.001807534	Tmem256
ENSMUSG00000014786	165.3323552	1.115637977	0.311012804	3.587112692	0.00033436	0.001811001	Slc9a5
ENSMUSG00000040618	989.7154078	0.934683132	0.26071679	3.585051554	0.000337012	0.001824117	Pck2
ENSMUSG00000024544	166.9453727	0.99178315	0.276666239	3.584763909	0.000337383	0.001825712	Ldlrad4
ENSMUSG00000026656	1216.481803	1.676310714	0.467821015	3.583230895	0.00033937	0.001835629	Fcgr2b
ENSMUSG00000021990	1478.563845	0.572695775	0.159831139	3.583130164	0.000339501	0.001835919	Spata13
ENSMUSG00000020635	71.10157967	1.418212397	0.395846159	3.582736284	0.000340014	0.001837436	Fkbp1b
ENSMUSG00000075595	1667.756397	0.627220328	0.175200987	3.580004527	0.000343588	0.001854661	Zfp652
ENSMUSG000000041075	649.2951377	0.74728711	0.208755359	3.579726583	0.000343954	0.001856195	Fzd7
ENSMUSG00000009549	1589.038523	1.174415431	0.32809307	3.579519169	0.000344227	0.001856825	NA
ENSMUSG00000040483	1087.884139	1.491142869	0.416571056	3.57956427	0.000344168	0.001856825	Xaf1
ENSMUSG00000042506	3458.535501	0.855126373	0.238951817	3.578656076	0.000345366	0.001862544	Usp22
ENSMUSG00000003380	1889.321557	1.156488154	0.323188208	3.578373612	0.000345739	0.001863711	Rabac1
ENSMUSG00000001100	1607.772082	0.662464034	0.185150504	3.57797587	0.000346265	0.001866125	Poldip2
ENSMUSG00000027459	406.583276	1.088260979	0.30419049	3.577564104	0.000346811	0.001868643	Fam110a
ENSMUSG00000015787	3.304780688	3.631996802	1.015286686	3.577311562	0.000347146	0.001869733	Abo
ENSMUSG00000036112	3326.763518	0.763514127	0.213433489	3.577293007	0.000347171	0.001869733	Metap2
ENSMUSG00000027208	256.5640267	2.034949308	0.568955605	3.576639879	0.000348039	0.001873354	Fgf7
ENSMUSG000000050640	47.3008754	1.879753578	0.525568614	3.576609269	0.00034808	0.001873354	Tmem150c
ENSMUSG00000031954	1632.708806	0.942068681	0.263901726	3.569770823	0.000357294	0.001917729	Cfdp1
ENSMUSG00000051113	38.92923234	1.281630808	0.359093956	3.569068165	0.000358253	0.001922011	Fam71e1
ENSMUSG00000031673	781.351879	1.406988763	0.394385692	3.567545154	0.000360341	0.00193234	Cdh11
ENSMUSG00000032657	334.7768706	1.146025152	0.321280061	3.567059677	0.000361009	0.001935486	Fam189b
ENSMUSG00000045672	482.1095034	1.000393869	0.280517459	3.566244585	0.000362133	0.001940636	Col27a1
ENSMUSG00000027566	4549.942083	0.768487021	0.215634951	3.56383331	0.000365478	0.001956795	Psma7
ENSMUSG00000044162	77.0479252	2.175033915	0.610410986	3.563228653	0.000366321	0.001960867	Tnlp3
ENSMUSG00000025420	18.3944276	2.072762944	0.581731695	3.563090959	0.000366514	0.001961455	Katnal2
ENSMUSG00000023999	15.48030713	1.942695435	0.545408058	3.561911866	0.000368164	0.001968465	Kif6
ENSMUSG00000008333	950.5276094	0.817147958	0.229509342	3.560412622	0.000370273	0.001978451	Snrpb2
ENSMUSG00000052560	741.3923548	0.88028713	0.247313333	3.559400214	0.000371703	0.001984379	Cpne8
ENSMUSG00000042354	1180.214628	1.119901163	0.314756683	3.557990109	0.000373703	0.001994465	Gnl3
ENSMUSG00000045201	11.86305006	2.300877914	0.64669879	3.557881892	0.000373857	0.001994465	Lrrc3b
ENSMUSG00000050423	11.86602172	2.871318	0.807076631	3.557677038	0.000374149	0.001995573	Ppp1r3g
ENSMUSG00000013562	2.735020584	3.525972832	0.991136717	3.557503996	0.000374395	0.001996419	NA
ENSMUSG00000021774	1252.63658	0.850197004	0.238990725	3.557447702	0.000374476	0.001996419	Ube2e1
ENSMUSG00000060121	290.5739076	0.986894497	0.277538522	3.555882941	0.000376712	0.002006539	Gemin2
ENSMUSG00000024533	322.5096648	1.109585118	0.312101579	3.555205075	0.000377684	0.002011269	Spire1
ENSMUSG00000025555	1372.989645	0.863150284	0.242791411	3.555110459	0.00037782	0.002011542	Farp1
ENSMUSG00000030881	1742.604587	0.607938773	0.171137089	3.55234963	0.000381807	0.002030947	Arfp2
ENSMUSG00000032715	658.5413379	1.553207186	0.437342982	3.55146247	0.000383097	0.002036438	Trib3
ENSMUSG00000047003	108.6264684	1.219393596	0.343398755	3.550955204	0.000383836	0.002039455	Zfp41
ENSMUSG00000024082	535.0260045	0.647647889	0.182395309	3.550792458	0.000384073	0.00204026	Ndufaf7
ENSMUSG00000086606	37.20958631	1.644384407	0.463229803	3.549824291	0.000385488	0.002046268	NA
ENSMUSG00000041245	25.03423068	1.986813121	0.559718527	3.549664743	0.000385722	0.002046731	Wnk3



ENSMUSG00000054612	83.46885118	1.143619548	0.322364374	3.547599048	0.00038876	0.002061927	Mgmt
ENSMUSG00000026187	709.5272392	1.050100328	0.29635546	3.543381078	0.000395031	0.002090525	Xrcc5
ENSMUSG00000031266	527.0980544	1.293179265	0.365042856	3.542540944	0.000396292	0.002094862	Gla
ENSMUSG00000033987	94.23083353	1.713351739	0.483711082	3.542097344	0.000396959	0.002097156	Dnah17
ENSMUSG00000076441	634.1887457	1.019888077	0.287935103	3.542076208	0.000396991	0.002097156	Ass1
ENSMUSG00000022157	9.383000485	3.389088487	0.95689572	3.541753209	0.000397477	0.002098793	Mcpt8
ENSMUSG00000018340	2807.089143	1.308257049	0.369431519	3.541270797	0.000398205	0.002102167	Anxa6
ENSMUSG00000019775	203.7008868	1.220337436	0.344778601	3.53948137	0.000400914	0.00211553	Rgs17
ENSMUSG00000041064	117.7563785	1.181857649	0.333936656	3.539167165	0.000401392	0.002117579	Pif1
ENSMUSG00000001729	4916.188769	0.666999557	0.188528995	3.537914986	0.0004033	0.002126414	Akt1
ENSMUSG00000019055	1038.617758	1.107102476	0.312927144	3.537892116	0.000403335	0.002126414	Plod1
ENSMUSG000000058441	32.24663866	2.230153913	0.630389721	3.537738386	0.00040357	0.00212718	Panx2
ENSMUSG00000025591	410.5084541	1.035832585	0.293072923	3.534385145	0.000408725	0.002153398	Tma16
ENSMUSG00000031951	95.1773342	1.05124476	0.297764036	3.530462496	0.000414834	0.002181712	Tmem231
ENSMUSG00000022972	442.9472765	0.815231632	0.230932438	3.530173751	0.000415287	0.002183128	1110004E09Rik
ENSMUSG00000058290	318.4014929	1.374542268	0.389429624	3.529629443	0.000416142	0.002186656	Espl1
ENSMUSG00000038502	2326.865942	0.805419237	0.228199421	3.529453468	0.000416419	0.002187627	Ptov1
ENSMUSG00000033249	59.43609306	1.302301694	0.368992984	3.52933999	0.000416598	0.002188081	Hsf4
ENSMUSG00000025461	55.85855624	1.598428197	0.45300776	3.528478625	0.000417956	0.002194712	Cd163l1
ENSMUSG00000028657	1644.831294	0.746696453	0.21162413	3.528408846	0.000418066	0.002194712	Ppt1
ENSMUSG00000028010	788.8910043	1.204770199	0.341666301	3.526160456	0.000421631	0.002212075	Gar1
ENSMUSG00000034055	307.566972	0.699781868	0.19848706	3.525579288	0.000422558	0.002216073	Phkx1
ENSMUSG00000100253	4.203627624	3.398362266	0.963919824	3.525565284	0.00042258	0.002216073	1700020N18Rik
ENSMUSG00000021242	6499.462602	0.924939745	0.262365773	3.525382658	0.000422871	0.002217112	Npc2
ENSMUSG00000029229	1247.289431	1.050936027	0.298181646	3.524482614	0.000424311	0.002222612	Chic2
ENSMUSG00000028330	1387.416631	0.803959681	0.228182214	3.523323175	0.000426171	0.002231458	Ncbp1
ENSMUSG00000041298	131.5482344	1.098190436	0.311834069	3.521714091	0.000428766	0.002243562	Katnal1
ENSMUSG00000030045	672.5188955	0.736803783	0.209267277	3.520874334	0.000430126	0.002249688	Mrpl19
ENSMUSG00000030417	1087.839962	0.727401659	0.206695639	3.519192102	0.000432863	0.002262022	NA
ENSMUSG00000072620	1550.173698	1.886923524	0.536181098	3.519190683	0.000432865	0.002262022	Sfn2
ENSMUSG00000069910	137.0762994	1.295514895	0.368381338	3.516776672	0.000436821	0.002281689	Spdl1
ENSMUSG000000024401	162.0507008	2.241310543	0.637382859	3.516427387	0.000437396	0.002283923	Tnf
ENSMUSG00000045996	352.2163922	0.945040625	0.268752643	3.516395645	0.000437449	0.002283923	NA
ENSMUSG00000030162	111.05957	2.605467375	0.741083281	3.515755166	0.000438505	0.00228797	Olr1
ENSMUSG00000030990	801.6983825	0.745169324	0.212041805	3.514256656	0.000440987	0.002299402	Pgap2
ENSMUSG00000071359	898.6241798	0.639361733	0.182010158	3.512780497	0.000443444	0.002310693	Tbpl1
ENSMUSG00000040312	411.4638988	0.945638909	0.269282078	3.511703851	0.000445244	0.002319564	Cchcr1
ENSMUSG00000073598	553.711866	2.073544989	0.591086413	3.508023432	0.000451449	0.002350346	1700066B19Rik
ENSMUSG00000014776	126.8089393	1.064229731	0.303386069	3.507839809	0.000451761	0.002351454	Nol3
ENSMUSG00000110767	4.605977862	3.434887471	0.979413958	3.507084457	0.000453045	0.002357106	NA
ENSMUSG00000097610	13.33592256	2.10531996	0.600386428	3.50660818	0.000453857	0.002360811	A930012L18Rik
ENSMUSG000000030607	9.610828976	3.289507349	0.938153459	3.506363824	0.000454274	0.002362463	Acan
ENSMUSG00000049907	243.3961045	1.854900394	0.529303134	3.504419819	0.000457603	0.002376137	Rasl11b
ENSMUSG00000097215	7.934291923	2.258618584	0.644625376	3.503769271	0.000458723	0.002380908	NA
ENSMUSG00000086593	3.859292599	3.380642669	0.964919682	3.503548255	0.000459103	0.002382364	Gm16548
ENSMUSG00000024989	334.965819	1.529438374	0.436668231	3.502518083	0.000460882	0.002390551	Cep55
ENSMUSG00000028391	188.1575434	0.983861338	0.280964929	3.501722943	0.00046226	0.002395604	Wdr31
ENSMUSG00000036622	1067.693229	1.060776953	0.30293995	3.501608001	0.000462459	0.002396115	Atp13a2
ENSMUSG00000075217	12.29650114	2.996978546	0.855929871	3.50143002	0.000462768	0.002397193	4833423E24Rik
ENSMUSG00000021177	238.6923055	1.029249026	0.294028789	3.500504256	0.000464379	0.002404486	Tdp1
ENSMUSG00000022335	129.0220247	1.199785345	0.342782881	3.50013204	0.000465028	0.002407322	Zfat
ENSMUSG00000063160	344.6753864	1.380894636	0.394773004	3.497945963	0.000468856	0.002425026	Numbl
ENSMUSG00000052031	186.7738386	0.621642538	0.177728919	3.497700544	0.000469288	0.00242673	Tagap1
ENSMUSG00000042558	697.1432654	0.641769305	0.183495771	3.49746102	0.000469709	0.002428382	Adprhl2
ENSMUSG00000027544	243.3819139	1.301623595	0.372510644	3.494191686	0.000475499	0.002456179	Nfatc2
ENSMUSG00000029610	869.0084711	0.725525136	0.207682517	3.493433862	0.000476851	0.00246209	Aimp2
ENSMUSG00000004105	971.5560112	1.444295971	0.413485697	3.492976862	0.000477668	0.002465235	Angptl2
ENSMUSG00000086003	12.86450153	1.654514845	0.473842368	3.49169884	0.000479959	0.002474909	B230206L02Rik
ENSMUSG00000058715	1173.609304	1.72667433	0.494905054	3.488900174	0.000485012	0.002498797	Fcer1g
ENSMUSG00000046916	76.06280782	1.236616925	0.354464386	3.488691602	0.000485391	0.002500205	Myct1
ENSMUSG00000060950	359.3911987	0.922133994	0.264557188	3.485575277	0.00049108	0.00252677	Trmt61a
ENSMUSG00000064380	4.160962558	3.039172334	0.872105262	3.484868702	0.000492379	0.002532903	NA
ENSMUSG00000056856	36.31075398	2.427722901	0.696677608	3.484714987	0.000492662	0.00253381	NA
ENSMUSG00000111533	4.459752391	3.055013012	0.876988504	3.483526864	0.000494853	0.002543431	NA
ENSMUSG00000038943	805.1260331	1.418647087	0.40728159	3.48320946	0.000495441	0.002545898	Prc1
ENSMUSG00000039427	705.3233739	0.958512171	0.275233173	3.482545943	0.00049667	0.002551664	Alg1
ENSMUSG00000065126	44.80057711	1.416052746	0.406693314	3.48186876	0.000497928	0.002557019	Snord104



ENSMUSG00000031253	361.332361	1.822075385	0.523438002	3.480976504	0.000499589	0.002564998	SrpX2
ENSMUSG00000031171	315.5635787	0.830135288	0.23853866	3.480086994	0.000501251	0.002571861	FtsJ1
ENSMUSG00000020682	146.7366457	0.993894368	0.285638126	3.479557793	0.000502242	0.002575834	Mmp28
ENSMUSG00000040938	297.5293766	1.607944605	0.462356542	3.477715696	0.000505706	0.00259248	Slc16a11
ENSMUSG00000073889	588.9803358	1.199300636	0.344860602	3.477638879	0.000505851	0.002592663	Il11ra1
ENSMUSG00000046413	6.248427021	3.313171552	0.953488961	3.47478753	0.000511258	0.002616989	NA
ENSMUSG00000025474	556.0735693	0.806994379	0.232424021	3.472078215	0.000516446	0.002640699	TubGcp2
ENSMUSG00000049751	2082.94863	1.111874793	0.320229937	3.472113827	0.000516377	0.002640699	Rpl36a1
ENSMUSG00000017390	1472.886606	1.120398497	0.322701906	3.471930214	0.000516731	0.002640751	Aldoc
ENSMUSG00000052776	395.4122471	1.524014741	0.438958445	3.471888417	0.000516811	0.002640751	Oas1a
ENSMUSG00000089760	5.174230385	3.738441018	1.076787945	3.471845163	0.000516894	0.002640751	NA
ENSMUSG00000034532	14.30452918	2.373211416	0.68391979	3.470014247	0.000520431	0.002657071	Fbxo16
ENSMUSG00000042306	2015.273785	1.898375872	0.547158704	3.469515985	0.000521397	0.002660861	S100a14
ENSMUSG00000030983	1547.305497	0.806122192	0.232401534	3.468661237	0.000523059	0.002667703	Bccip
ENSMUSG00000034021	582.4848114	0.583635235	0.168264709	3.468554031	0.000523267	0.002668113	Pds5b
ENSMUSG00000006356	1370.574601	1.084774798	0.312820887	3.46771857	0.000524897	0.002674125	Crip2
ENSMUSG00000097727	81.53985858	1.152482136	0.332393446	3.46722281	0.000525866	0.002678488	F630040K05Rik
ENSMUSG00000023232	5780.361794	0.88766784	0.256040006	3.466910721	0.000526477	0.00268045	Serinc2
ENSMUSG00000031521	558.7179172	0.871936672	0.251523068	3.466627055	0.000527033	0.002682705	Aga
ENSMUSG00000108801	5.599577952	2.50991088	0.724300963	3.465287235	0.000529665	0.00269553	NA
ENSMUSG00000001416	5547.497091	0.878690163	0.253687809	3.463667275	0.000532865	0.002711233	Cct3
ENSMUSG00000020255	1431.822463	0.767968321	0.221775678	3.462815796	0.000534554	0.002719244	D10Wsu102e
ENSMUSG00000026154	336.5415695	0.783769514	0.226476915	3.460703774	0.000538765	0.00273832	Sdhaf4
ENSMUSG00000027076	361.4792081	0.80239106	0.23187927	3.460382899	0.000539408	0.002740999	Timm10
ENSMUSG00000087497	167.7227741	0.914094351	0.26419793	3.459884604	0.000540407	0.002745489	2810001G20Rik
ENSMUSG00000037313	962.3210922	1.264193318	0.365429884	3.459468901	0.000541242	0.002747967	Tacc3
ENSMUSG00000004268	2134.726866	0.766630573	0.221616695	3.459263624	0.000541654	0.002749475	Emg1
ENSMUSG00000008373	1194.506129	0.783468241	0.226496328	3.459077018	0.00054203	0.002750793	Prpf31
ENSMUSG00000026383	771.2904759	0.701285209	0.20274307	3.458984856	0.000542215	0.002751147	Epb41I5
ENSMUSG00000037902	1933.159291	1.575461062	0.455495832	3.458782609	0.000542623	0.002752625	Sirpa
ENSMUSG00000002603	780.825543	1.460033789	0.422240737	3.457823134	0.000544559	0.002761267	Tgfb1
ENSMUSG000000032586	316.0649988	1.749904141	0.506122331	3.457472698	0.000545267	0.002764271	Traip
ENSMUSG00000028882	1095.554569	0.612011512	0.177052633	3.456664275	0.000546906	0.002771985	Ppp1r8
ENSMUSG00000038879	761.2822592	1.10183381	0.31884933	3.455656662	0.000548954	0.002780587	Nipal2
ENSMUSG00000003865	847.7519098	0.891425752	0.258092484	3.453900471	0.000552541	0.002797564	Gys1
ENSMUSG00000071337	857.9602762	0.658987706	0.190806337	3.453699272	0.000552954	0.002799055	Tia1
ENSMUSG000000040415	974.6436774	0.976994429	0.282920478	3.45324749	0.000553881	0.002802553	Dtx3
ENSMUSG00000073676	2438.27778	0.963307405	0.278989941	3.452839203	0.00055472	0.002806201	Hspe1
ENSMUSG00000110207	3.087339157	3.530790026	1.022824531	3.45199975	0.000556448	0.002813747	NA
ENSMUSG00000020018	839.2774659	1.073480207	0.310980482	3.451921483	0.00055661	0.002813769	Snrpf
ENSMUSG00000029145	1055.828047	0.981986364	0.284478476	3.451882815	0.000556689	0.002813769	Eif2b4
ENSMUSG000000014303	282.8849855	1.175272402	0.340562634	3.450972846	0.00055857	0.002822072	Glis2
ENSMUSG00000045751	368.4563437	0.963876986	0.279336732	3.450591619	0.000559359	0.002824859	Mms22l
ENSMUSG00000015083	26.14823167	1.464691808	0.424597294	3.449602311	0.000561413	0.002834026	C8g
ENSMUSG00000030342	3908.851955	1.13886022	0.330313805	3.447812972	0.000565145	0.002851655	Cd9
ENSMUSG00000047473	65.13775866	1.243124629	0.360736753	3.44607146	0.0005688	0.002868268	Zfp30
ENSMUSG00000024613	997.5217094	1.07499071	0.31196938	3.445821216	0.000569327	0.002869707	Tcof1
ENSMUSG00000037159	15.54270329	1.882214845	0.546267589	3.445591287	0.000569811	0.00287154	Wee2
ENSMUSG00000105331	3.87164853	3.62611077	1.052631477	3.444805566	0.00057147	0.002878068	NA
ENSMUSG00000059657	182.7794406	2.708263194	0.786340502	3.444135442	0.000572889	0.0028846	Stfa2l1
ENSMUSG00000025153	4231.601681	1.410231726	0.40946859	3.444053489	0.000573062	0.002884863	Fasn
ENSMUSG00000006724	15.51994913	1.971757604	0.572687914	3.442987979	0.000575325	0.002893188	Cyp27b1
ENSMUSG00000087249	14.47252056	2.148611809	0.62432132	3.441515995	0.000578464	0.002906514	Gm16062
ENSMUSG00000092035	141.209989	2.241243751	0.651249571	3.441451403	0.000578602	0.002906593	Peg10
ENSMUSG00000010051	57.565175	1.255094797	0.364837918	3.440143514	0.000581406	0.002918824	Hyal1
ENSMUSG00000014226	1302.367746	0.794796016	0.231113359	3.438987776	0.000583894	0.002930075	Cacybp
ENSMUSG00000034773	140.8836761	1.312000458	0.381559069	3.438525162	0.000584892	0.002934466	BC030867
ENSMUSG00000020775	1080.421381	1.087665657	0.316452124	3.43706227	0.00058806	0.002947249	Mrpl38
ENSMUSG00000107126	3.005844665	3.511705142	1.021703214	3.437108833	0.000587959	0.002947249	NA
ENSMUSG00000073427	65.17123933	0.864037976	0.251423392	3.436585467	0.000589096	0.002951197	Gm4924
ENSMUSG00000031808	1114.07295	0.903006332	0.262791814	3.436204184	0.000589926	0.002954108	Slc27a1
ENSMUSG00000036615	490.0401263	0.955311697	0.278091271	3.435245181	0.000592018	0.002963333	Rfxap
ENSMUSG00000023094	126.8380762	1.71232766	0.498478531	3.435108141	0.000592317	0.002964207	MsrB2
ENSMUSG00000038126	223.6007739	0.939316261	0.273463475	3.434887455	0.0005928	0.002965997	Mphosph9
ENSMUSG00000044364	10.596383	2.067894302	0.602107854	3.434425062	0.000593812	0.002970437	Tmem74b
ENSMUSG00000025731	1100.784821	0.863151922	0.251332548	3.434302204	0.000594081	0.002970532	Mettl26
ENSMUSG00000059668	172.3694829	2.416445565	0.703711902	3.433856323	0.00059506	0.002974797	Krt4

ENSMUSG00000048355	12.08658897	1.835103457	0.534744491	3.431738873	0.000599725	0.002995597	Arxes1
ENSMUSG00000068744	78.28596585	1.245672308	0.363056262	3.431072365	0.0006012	0.003001074	Psrc1
ENSMUSG00000032171	999.6402982	0.634033179	0.184910568	3.428863948	0.000606113	0.003022424	Pin1
ENSMUSG00000063145	99.91160632	0.965155445	0.281642298	3.426883859	0.00061055	0.003041473	Bbs5
ENSMUSG00000106874	7678.338497	1.982287136	0.578536988	3.426379257	0.000611686	0.003046374	NA
ENSMUSG00000097195	629.9466363	0.882434215	0.257629151	3.425211044	0.000614322	0.003058863	Snhg5
ENSMUSG00000024597	5745.928676	1.291586087	0.377111266	3.424946971	0.000614919	0.003061196	Slc12a2
ENSMUSG00000024663	213.7222293	1.077346641	0.314795195	3.422373209	0.00062077	0.003087735	Rab3il1
ENSMUSG00000042976	11.72930544	1.828776532	0.534429604	3.421922211	0.000621801	0.003092214	NA
ENSMUSG00000037966	875.9075595	1.28340941	0.375144928	3.421102926	0.000623677	0.003100674	Ninj1
ENSMUSG00000030872	528.3722386	1.182287263	0.345644912	3.420525582	0.000625003	0.003106184	Gga2
ENSMUSG00000029910	841.4542807	1.434704847	0.419470537	3.420275608	0.000625577	0.00310774	Mad2l1
ENSMUSG00000054309	1506.895499	0.752860838	0.22011433	3.420317251	0.000625481	0.00310774	Cpsf3
ENSMUSG00000057863	3860.488563	0.796785297	0.233012953	3.419489291	0.000627388	0.003114131	Rpl36
ENSMUSG00000044350	318.3050959	1.29016094	0.377353516	3.418971558	0.000628583	0.00311941	Lacc1
ENSMUSG00000011254	218.4182354	0.787503635	0.230415386	3.417756289	0.000631396	0.003129449	Thgl1
ENSMUSG00000031392	1591.612023	0.590002314	0.172706887	3.416206053	0.000635002	0.003143385	Irak1
ENSMUSG00000082152	5.421798994	2.680454997	0.784818606	3.415381561	0.000636927	0.003152259	NA
ENSMUSG00000046574	721.6817099	0.877688162	0.257054935	3.414399189	0.000639228	0.003161193	Prr12
ENSMUSG00000021916	410.0760116	0.774268866	0.226854674	3.413061121	0.000642375	0.003173273	Glt8d1
ENSMUSG00000024114	94.21498294	1.771210106	0.519120977	3.411940925	0.000645021	0.003183032	Prss41
ENSMUSG00000034252	867.4150212	1.168957037	0.342651178	3.411507426	0.000646047	0.003187436	Tmem64
ENSMUSG00000078954	127.8908329	1.067318518	0.312911925	3.410923116	0.000647433	0.003192948	Arhgap8
ENSMUSG00000047238	170.3842982	0.810236326	0.23758067	3.410362997	0.000648765	0.00319773	Mageh1
ENSMUSG00000025995	771.7048333	0.953860622	0.279712345	3.410148463	0.000649275	0.003199374	Wdr75
ENSMUSG00000029029	317.4551883	1.07765122	0.316070081	3.409532526	0.000650743	0.003203949	Wrap73
ENSMUSG00000002324	1205.65004	1.993231866	0.584727988	3.408818985	0.000652448	0.003209015	Rec8
ENSMUSG00000089829	10.30340501	1.813652618	0.532030184	3.408928048	0.000652187	0.003209015	NA
ENSMUSG00000109602	21.01103468	1.595974255	0.468302431	3.407999081	0.000654411	0.003218007	NA
ENSMUSG00000044340	452.5256923	0.726348187	0.213160102	3.407524117	0.000655551	0.003222946	Philpp1
ENSMUSG00000059278	771.9473131	0.926348745	0.271874468	3.407266415	0.00065617	0.003225266	Naa38
ENSMUSG00000034450	244.5787727	3.587140644	1.052892371	3.406939536	0.000656957	0.003227852	Gulo
ENSMUSG00000070337	35.59930119	1.690807899	0.496349831	3.406484289	0.000658053	0.003231985	Gpr179
ENSMUSG00000030825	26.27188411	1.873960692	0.550271772	3.405518489	0.000660385	0.003242686	Hsd17b14
ENSMUSG00000007080	403.8907287	1.214526285	0.356727954	3.404628852	0.00066254	0.003251252	Pole
ENSMUSG00000002718	1402.847625	0.980652397	0.288065916	3.404263889	0.000663426	0.003254254	Cse1l
ENSMUSG00000024902	1009.826561	0.925471754	0.272026095	3.402143294	0.000668596	0.003277581	Mrpl11
ENSMUSG00000039620	64.6344626	1.341018422	0.394236527	3.401558029	0.000670029	0.00328393	6430573F11Rik
ENSMUSG00000040699	1094.756659	1.887500464	0.554923547	3.401370289	0.000670489	0.003285509	Limd2
ENSMUSG00000035109	61.22574751	1.056542073	0.310664127	3.400914299	0.000671609	0.003289637	Shc4
ENSMUSG00000027133	1102.259684	1.001727528	0.294602267	3.400270936	0.000673191	0.003296708	Nop10
ENSMUSG000000109780	20.5134722	1.527230525	0.449239818	3.399588516	0.000674873	0.003304264	NA
ENSMUSG00000020457	1819.832985	0.789726026	0.232358259	3.398743091	0.000676963	0.003311764	Drg1
ENSMUSG00000027067	4297.693601	0.770065923	0.226580931	3.398635184	0.00067723	0.003311933	Ssrp1
ENSMUSG00000019579	2478.182912	0.84794807	0.249713421	3.395684808	0.000684571	0.003345542	Mydgd
ENSMUSG00000045876	12.08720954	1.935202284	0.569947764	3.395402889	0.000685277	0.0033483	Pcdhb8
ENSMUSG00000029701	994.1389977	0.586457579	0.172725346	3.395318602	0.000685488	0.003348642	Rbm28
ENSMUSG00000006526	398.7093679	0.691307216	0.203664982	3.39433519	0.000687954	0.00335931	Tmem110
ENSMUSG00000039187	117.9543144	1.228626043	0.361970024	3.394275658	0.000688104	0.00335935	Fanci
ENSMUSG00000027569	639.145156	0.838752939	0.247241889	3.392438648	0.000692734	0.003379178	Mrgbp
ENSMUSG00000104684	6.771208058	2.509724474	0.740162067	3.390776947	0.000696948	0.003398337	NA
ENSMUSG00000030161	1808.139257	0.716164679	0.211216136	3.390672201	0.000697214	0.003398938	Gabarapl1
ENSMUSG00000052616	7.906318463	1.948958359	0.574904176	3.390057754	0.000698779	0.003405168	Terb1
ENSMUSG00000028676	1845.245174	0.673413173	0.198685077	3.389349536	0.000700586	0.003411177	NA
ENSMUSG00000053841	1499.845767	0.679363435	0.200453582	3.389130928	0.000701145	0.003413198	Txlna
ENSMUSG00000035829	100.138318	1.457185175	0.430026729	3.388592096	0.000702524	0.003419211	Ppp1r26
ENSMUSG00000073400	26.43414119	2.141127257	0.631909853	3.388342889	0.000703163	0.003420217	Trim10
ENSMUSG00000090553	2113.232206	0.993301657	0.293199688	3.38779916	0.000704558	0.003426303	Snrpe
ENSMUSG00000038542	771.6886867	0.688501063	0.203239824	3.387628708	0.000704996	0.003427183	Pcid2
ENSMUSG00000020077	2004.210346	1.912094899	0.564537554	3.387010992	0.000706586	0.003434052	Srgn
ENSMUSG00000052364	66.42864148	0.853898117	0.252132021	3.38671032	0.00070736	0.003437114	B630019K06Rik
ENSMUSG00000041754	33.07123537	2.438421713	0.720130158	3.386084705	0.000708975	0.003444255	Trem3
ENSMUSG00000028760	2557.395725	0.627714106	0.185440184	3.384995054	0.000711795	0.003455837	Eif4g3
ENSMUSG00000020469	556.6610035	1.38229545	0.408442739	3.384306582	0.000713583	0.003463099	Myl7
ENSMUSG00000022686	167.7879681	1.925091795	0.569192122	3.382147646	0.000719215	0.003488294	B3gnt5
ENSMUSG00000005732	2241.387711	1.403643354	0.415029758	3.382030629	0.000719521	0.003489068	Ranbp1
ENSMUSG00000018433	765.0677697	0.906999026	0.268263353	3.381002343	0.000722219	0.003500723	Nol11

ENSMUSG00000049577	1354.092068	1.730820627	0.512015206	3.380408642	0.000723781	0.003507578	Zfpm1
ENSMUSG00000029001	288.9941673	1.220395818	0.361031602	3.380301923	0.000724062	0.003508225	Fbxo44
ENSMUSG00000064247	20.80267955	1.94847338	0.576450518	3.380122525	0.000724535	0.0035098	Plcx1d1
ENSMUSG00000039476	27.42294306	2.300433469	0.680667809	3.379671312	0.000725726	0.003514544	Prrx2
ENSMUSG00000015222	172.4463778	1.364687464	0.403932853	3.37850079	0.000728822	0.003528409	Map2
ENSMUSG00000002524	3037.142655	0.71944815	0.212988845	3.377867755	0.000730502	0.003533366	Puf60
ENSMUSG00000026180	192.9908613	2.073080507	0.614034531	3.376162744	0.000735044	0.003552739	Cxcr2
ENSMUSG00000086637	4.093498045	2.99466801	0.887061531	3.375941698	0.000735635	0.003554871	NA
ENSMUSG00000021144	1242.777413	0.814175386	0.24124275	3.374921674	0.000738367	0.003566622	Mta1
ENSMUSG00000058317	525.4179459	1.225644188	0.363420736	3.372521338	0.000744833	0.003594202	Ube2e2
ENSMUSG00000001768	2193.518933	0.893957192	0.265096239	3.372198696	0.000745706	0.003597685	Rin2
ENSMUSG00000056091	207.6497251	1.454238419	0.431345332	3.371401782	0.000747867	0.003607376	Slc3gal5
ENSMUSG00000078812	16137.94187	0.857936268	0.254540558	3.370528742	0.000750241	0.003618092	Eif5a
ENSMUSG00000039055	115.5177508	1.488645145	0.441860311	3.369040192	0.000754304	0.003634737	Eme1
ENSMUSG00000059022	49.96977939	1.766635238	0.524368657	3.369071004	0.00075422	0.003634737	Kcp
ENSMUSG00000017999	1265.341951	0.632408187	0.18772697	3.368765748	0.000755056	0.00363762	Ddx27
ENSMUSG00000028949	216.5327051	1.03304768	0.306683021	3.368454107	0.00075591	0.00364031	Smardc3
ENSMUSG00000068039	6480.845244	0.79153327	0.23498441	3.368450149	0.000755921	0.00364031	Tcp1
ENSMUSG00000028964	3134.115149	0.915026814	0.271778594	3.36680973	0.000760431	0.003659807	Park7
ENSMUSG00000039005	309.1218124	1.359041115	0.403766464	3.365908848	0.000762919	0.00366955	Tlr4
ENSMUSG00000047104	6.516777356	2.403422631	0.714736342	3.362670247	0.000771925	0.003708363	Pbp2
ENSMUSG00000020829	499.7799426	1.373713842	0.40856194	3.36231476	0.00077292	0.003711828	Slc46a1
ENSMUSG00000097080	64.26016683	0.994617987	0.295954679	3.360710464	0.000777423	0.003731755	1700086O06Rik
ENSMUSG00000078144	3.557290785	3.244237893	0.965690049	3.359502251	0.00078083	0.003746597	Capns2
ENSMUSG00000067201	31.01695091	2.175759629	0.647701301	3.359202191	0.000781679	0.00374991	H2-M9
ENSMUSG00000031198	791.0477959	0.738699496	0.219932038	3.358762559	0.000782923	0.003753607	Fundc2
ENSMUSG00000021614	349.619448	1.692140114	0.503983224	3.357532616	0.000786415	0.003768065	Vcan
ENSMUSG00000024246	102.5423604	0.996033818	0.296952041	3.354190848	0.000795974	0.003807726	Thumpd2
ENSMUSG00000051256	664.7842284	0.662806558	0.197713509	3.352358487	0.000801262	0.003831477	Jagn1
ENSMUSG00000060675	968.0422322	0.720617707	0.214963114	3.352285391	0.000801474	0.003831718	Pla2g16
ENSMUSG00000030662	3276.61741	0.859358228	0.256431487	3.351219616	0.000804565	0.00384455	Ipo5
ENSMUSG00000028645	2517.683903	1.418826157	0.423534616	3.349965043	0.000808218	0.0038593	Slc2a1
ENSMUSG00000028614	627.97897	1.082011505	0.323021767	3.349655081	0.000809122	0.003862068	Ndc1
ENSMUSG00000037638	629.1549994	1.145474568	0.342210812	3.347277545	0.000816095	0.003893782	Zbtb42
ENSMUSG00000020610	1041.730372	0.67724489	0.202345578	3.346971532	0.000816996	0.003897301	Amz2
ENSMUSG00000028037	130.9349789	1.796400205	0.536747966	3.346822566	0.000817435	0.003898613	Ifi44
ENSMUSG00000020648	129.3416176	1.01804204	0.304274519	3.34580116	0.000820452	0.003909862	Dus4l
ENSMUSG00000063445	242.6187787	1.612615867	0.482112724	3.34489381	0.000823141	0.003920315	Nmral1
ENSMUSG00000029591	414.4613253	1.466285427	0.438395246	3.34466544	0.000823819	0.003922758	Ung
ENSMUSG00000058833	888.2006142	0.819036984	0.244923738	3.344049014	0.000825651	0.003929909	2810428I15Rik
ENSMUSG00000035472	3.961249742	3.324328081	0.994500096	3.342712682	0.000829638	0.00394493	Slc25a21
ENSMUSG00000037725	295.4033257	1.367957838	0.409290931	3.342262767	0.000830984	0.003950539	Ckap2
ENSMUSG00000028076	116.5217676	1.132447118	0.338879052	3.341744232	0.000832537	0.003957134	Cd1d1
ENSMUSG00000063234	46.76653495	2.448351573	0.732687437	3.341604414	0.000832957	0.003958336	Gpr84
ENSMUSG00000012405	5015.840875	0.632451652	0.189336307	3.340361197	0.000836695	0.003975305	Rpl15
ENSMUSG00000104301	7.365515434	3.095414381	0.926781283	3.339962122	0.000837898	0.00397943	Wdr49
ENSMUSG00000031568	670.3611272	0.713366884	0.213609642	3.339581853	0.000839046	0.003984086	Rwdd4a
ENSMUSG00000028073	661.4324138	1.00207779	0.300072695	3.339450095	0.000839444	0.00398518	Pear1
ENSMUSG00000032334	763.2048657	1.889896326	0.56611921	3.33833633	0.000842817	0.003997196	Loxl1
ENSMUSG00000068606	58.77044022	1.694672566	0.507753282	3.337590574	0.000845082	0.004006338	Gm4841
ENSMUSG00000030245	727.2836594	0.950970266	0.284932373	3.33752973	0.000845267	0.004006416	Golt1b
ENSMUSG00000074676	32.24130826	1.566700976	0.469500175	3.336955042	0.000847016	0.004012396	Foxs1
ENSMUSG00000111664	9.343403069	1.803286232	0.540399708	3.336948941	0.000847035	0.004012396	NA
ENSMUSG00000024855	623.1122795	0.928560048	0.278279459	3.336789751	0.00084752	0.004013894	Pacs1
ENSMUSG00000043727	5.352313491	3.204774857	0.961101931	3.334479679	0.000854591	0.004044158	F830045P16Rik
ENSMUSG00000053166	16.34341381	2.885523219	0.865674312	3.33326654	0.000858327	0.004061026	Cdh22
ENSMUSG00000043487	94.14862606	0.892403808	0.267738074	3.333122534	0.000858771	0.004062319	Acot6
ENSMUSG00000042303	1281.968412	0.991690186	0.297544433	3.332914598	0.000859413	0.004063738	Sgsm3
ENSMUSG00000017002	2126.435215	2.022317746	0.606882958	3.332302745	0.000861305	0.004070253	Slpi
ENSMUSG00000029762	1185.050773	1.564834226	0.469607013	3.332220736	0.000861559	0.004070643	Akr1b8
ENSMUSG00000022554	348.7591835	0.858165793	0.257545615	3.332092419	0.000861956	0.004070901	Hgh1
ENSMUSG00000057173	4.073772816	3.277729696	0.984123638	3.330607629	0.000866567	0.004091048	Rfx8
ENSMUSG00000101655	47.34108346	1.304817719	0.391776748	3.330513428	0.00086686	0.00409162	2310040G24Rik
ENSMUSG00000038416	937.7740738	0.697311147	0.209467872	3.328964672	0.000871695	0.004109541	Cdc16
ENSMUSG00000079610	124.3692911	0.838958526	0.25204234	3.328641238	0.000872707	0.0041135	Ankrd39
ENSMUSG00000002458	320.4579144	1.708869437	0.513570077	3.32743186	0.000876504	0.004129546	Rgs19
ENSMUSG00000022800	1303.411801	0.757284317	0.227747005	3.325112077	0.00088383	0.004161797	Fyttd1

ENSMUSG00000031848	1935.541553	0.89760044	0.269944051	3.325135106	0.000883757	0.004161797	Lsm4
ENSMUSG00000044177	63.94734355	0.845723424	0.254434498	3.323933778	0.000887573	0.004177764	Wfikkn2
ENSMUSG00000000142	2406.798031	1.635974312	0.492212314	3.323716747	0.000888264	0.004177942	Axin2
ENSMUSG000000031169	179.1484605	1.510672399	0.454503514	3.32378596	0.000888043	0.004177942	Porcn
ENSMUSG00000026975	250.2014422	0.721868123	0.217200184	3.323515244	0.000888906	0.00417907	Dph7
ENSMUSG00000070327	2102.405706	1.048534919	0.315584102	3.322521361	0.000892078	0.004192327	Rnf213
ENSMUSG00000098274	2011.288313	0.961233112	0.289430063	3.321123944	0.000896557	0.004210044	NA
ENSMUSG00000026958	513.1580837	0.944392241	0.284385629	3.320815631	0.000897548	0.004213864	Dpp7
ENSMUSG00000094053	68.87155904	2.700411103	0.813223783	3.320624851	0.000898162	0.004215912	Scgb2b7
ENSMUSG00000027944	660.627368	0.855809906	0.257888302	3.318529377	0.000904928	0.004244699	Hax1
ENSMUSG00000028568	1337.321062	0.595553481	0.17946443	3.318504283	0.000905009	0.004244699	Btf3l4
ENSMUSG00000063787	703.7531721	0.844451281	0.254449005	3.318209426	0.000905965	0.004248099	Chchd1
ENSMUSG00000057156	203.3755294	0.890227895	0.268317319	3.31781749	0.000907237	0.004252631	Homez
ENSMUSG00000105509	48.34511875	1.500567319	0.452397824	3.31691984	0.000910157	0.004265476	NA
ENSMUSG00000025508	13733.76206	0.80649772	0.243167525	3.316634158	0.000911088	0.004268724	Rplp2
ENSMUSG00000036777	435.2345913	1.196573967	0.360983271	3.314762937	0.000917209	0.004294287	Anln
ENSMUSG00000040675	723.2358374	1.131365977	0.34146955	3.313226548	0.000922262	0.004313697	Mthfd1l
ENSMUSG00000038037	128.6494384	1.124257788	0.339536431	3.311155104	0.000929117	0.004342338	Socs1
ENSMUSG00000028199	223.8294157	1.664410333	0.502688978	3.311014178	0.000929585	0.004343671	Cryz
ENSMUSG00000005370	973.4996036	0.87874597	0.265431681	3.310629556	0.000930863	0.004348789	Msh6
ENSMUSG00000020088	3404.126771	0.532729285	0.160924638	3.310427123	0.000931537	0.004350225	Sar1a
ENSMUSG00000039684	16.00979814	1.629310604	0.49231042	3.309518826	0.000934565	0.004362649	NA
ENSMUSG00000030839	226.5289973	0.860359609	0.259985101	3.309265051	0.000935412	0.00436489	Sergef
ENSMUSG00000051748	209.8666348	2.11127223	0.637987553	3.309268683	0.0009354	0.00436489	Wfdc21
ENSMUSG00000054855	224.7660061	1.842772951	0.55696243	3.308612663	0.000937595	0.004373355	Rnd1
ENSMUSG00000028148	7.78995535	3.278661928	0.990983528	3.30849286	0.000937996	0.004374367	Them5
ENSMUSG00000024078	340.8822903	1.037311879	0.313718202	3.306508429	0.000944665	0.004403913	Ttc27
ENSMUSG00000049086	1205.57112	1.7724826	0.536060468	3.306497502	0.000944702	0.004403913	Bmyc
ENSMUSG00000030725	213.8455687	1.218384214	0.368586374	3.305559566	0.00094787	0.004417812	Lipt2
ENSMUSG00000031826	1713.467121	0.696287459	0.210760789	3.303685948	0.000954227	0.004444825	Usp10
ENSMUSG00000030142	653.796686	2.363650809	0.715564543	3.303197218	0.000955891	0.004450194	Clec4e
ENSMUSG000000025351	6292.869233	0.606952021	0.183785544	3.302501424	0.000958266	0.004458773	Cd63
ENSMUSG00000040289	215.5275542	1.508641162	0.456821004	3.302477664	0.000958347	0.004458773	Hey1
ENSMUSG00000049015	15.31508737	1.92384621	0.582653486	3.301870249	0.000960425	0.00446669	Olf1467
ENSMUSG00000001158	681.6566628	0.706973947	0.214143552	3.301401989	0.000962029	0.004473277	Snrnp27
ENSMUSG00000078517	1140.853623	0.609236199	0.184546165	3.301267196	0.000962492	0.004474551	Emc1
ENSMUSG00000057406	1438.569878	0.66948515	0.202799794	3.301212185	0.00096268	0.004474552	Whsc1
ENSMUSG00000056130	32.57257536	1.4586604	0.441992355	3.300193735	0.000966181	0.004489945	Ticam2
ENSMUSG00000035342	1428.727906	0.892617054	0.270565815	3.299075509	0.000970038	0.004505225	Lzts2
ENSMUSG00000031799	5369.304841	1.030547629	0.312390179	3.298911739	0.000970604	0.004506973	Tpm4
ENSMUSG00000019948	128.1047693	0.842162917	0.255361012	3.297930681	0.000974002	0.004515949	Actr6
ENSMUSG000000079658	1444.925621	0.739157562	0.224120532	3.2980359	0.000973637	0.004515949	NA
ENSMUSG00000024912	143.6237472	2.215697537	0.67186219	3.29784526	0.000974298	0.004516181	Fosl1
ENSMUSG00000041556	113.86896	1.837310653	0.557254333	3.297077376	0.000976966	0.004527663	Fbxo2
ENSMUSG00000073705	140.3791512	1.438140367	0.436212739	3.296878422	0.000977658	0.004529988	Apitd1
ENSMUSG00000024891	83.11869771	0.949803005	0.288257233	3.294984115	0.000984272	0.004557968	Slc29a2
ENSMUSG00000030760	584.779316	0.608343926	0.18462723	3.294984846	0.00098427	0.004557968	Acer3
ENSMUSG00000035778	506.3499685	1.283840169	0.389799489	3.293591208	0.000989162	0.004577044	Ggta1
ENSMUSG00000035443	605.3088589	0.795593448	0.241647119	3.292377127	0.000993443	0.004595955	Thyn1
ENSMUSG00000086706	36.31051796	1.355813811	0.411826336	3.292197929	0.000994076	0.00459799	LOC102640771
ENSMUSG00000021276	445.1473166	0.947624125	0.287849005	3.292087555	0.000994466	0.004598899	Cinp
ENSMUSG000000025142	3922.051752	1.456871088	0.442552623	3.291972553	0.000994873	0.00459899	Aspsr1
ENSMUSG00000024287	657.2111498	0.625448745	0.190006514	3.291722652	0.000995758	0.004602182	Thoc1
ENSMUSG00000022682	1035.297667	0.808226622	0.245559939	3.291361873	0.000997036	0.004606297	Rrn3
ENSMUSG00000004285	2468.206661	0.870036583	0.264423707	3.290312328	0.001000762	0.004622615	Atp6v1f
ENSMUSG00000030521	571.4172934	0.813391489	0.247268257	3.28951034	0.001003619	0.004634908	Mphosph10
ENSMUSG00000029625	773.5456978	0.445826167	0.135566707	3.288611013	0.001006831	0.004646129	Cpsf4
ENSMUSG00000031383	87.41480122	1.670487723	0.507982087	3.288477616	0.001007308	0.004647428	Dusp9
ENSMUSG00000050064	52.53253212	1.196135287	0.363822819	3.287686271	0.001010143	0.004658701	Zfp697
ENSMUSG00000050188	248.9607125	1.168537667	0.355465677	3.287343178	0.001011375	0.004663475	Lsm10
ENSMUSG00000051279	23.07084953	2.077985276	0.632281576	3.286487154	0.001014454	0.00467495	Gdf6
ENSMUSG000000026433	246.1222425	1.035196543	0.315031037	3.286014456	0.001016158	0.004681895	Rab29
ENSMUSG00000036731	22.08431778	1.810149614	0.551009163	3.285153381	0.001019269	0.004693496	Cysrt1
ENSMUSG00000021306	392.1894119	1.336729769	0.406941942	3.284816902	0.001020487	0.004696374	Gpr137b
ENSMUSG00000005102	321.0897356	0.573049967	0.174554159	3.282935059	0.001027323	0.004726921	Eif2ak4
ENSMUSG00000020549	707.2180066	0.624877899	0.19035986	3.282613782	0.001028495	0.004731394	Elac2
ENSMUSG00000063317	278.3590031	0.975235055	0.297189256	3.281528643	0.00103246	0.004745961	Usp31



ENSMUSG00000055884	133.0125443	0.819223824	0.249699809	3.2808348	0.001035003	0.004755811	Fancm
ENSMUSG00000044562	323.2453921	1.029000246	0.313840107	3.278740425	0.001042715	0.004789392	Rasip1
ENSMUSG00000097814	33.61027638	2.094179286	0.638818602	3.278206491	0.001044689	0.004796607	NA
ENSMUSG00000020460	9618.665449	0.842445363	0.257107532	3.276626545	0.001050552	0.00482073	NA
ENSMUSG00000022043	1051.317097	1.171901605	0.357805722	3.275245573	0.001055702	0.004843424	Trim35
ENSMUSG00000069114	140.4713004	1.313534221	0.401253903	3.273573696	0.001061967	0.004869347	Zbtb10
ENSMUSG00000074754	182.1343713	0.675717118	0.206464388	3.27280227	0.001064869	0.004880771	Gm561
ENSMUSG00000106396	2.769893614	3.38437221	1.034229158	3.272362014	0.001066529	0.004887436	NA
ENSMUSG00000045689	19.01520854	1.461325778	0.447376214	3.266436018	0.001089104	0.004982237	Pcdhb4
ENSMUSG00000032485	1636.865244	0.519780552	0.159180901	3.265344945	0.001093308	0.004996659	Scap
ENSMUSG00000024217	1128.471229	0.775091574	0.237390323	3.265051268	0.001094443	0.005000881	Snrpc
ENSMUSG00000020676	589.039368	1.899553411	0.58180237	3.264946153	0.001094849	0.005001775	Ccl11
ENSMUSG00000057236	4625.291988	0.854508315	0.261742484	3.264690936	0.001095836	0.005005321	Rbbp4
ENSMUSG00000042105	365.2546106	0.786208908	0.240846806	3.264352645	0.001097145	0.005009375	Inpp5f
ENSMUSG00000055184	37.23373357	1.314903537	0.40293201	3.263338488	0.001101079	0.005026372	Fam72a
ENSMUSG00000039934	254.8180061	1.589002985	0.487076019	3.262330562	0.001105002	0.005040405	Gsap
ENSMUSG00000034345	1065.50255	0.85878118	0.263474488	3.259447188	0.001116296	0.005085085	Gtf2h5
ENSMUSG00000022369	268.6687058	1.015192925	0.311488428	3.259167379	0.001117397	0.005089127	Mtbp
ENSMUSG00000022637	1418.186327	1.366579487	0.419363178	3.258701664	0.001119233	0.005095534	Cblb
ENSMUSG00000002055	456.7949534	1.136696588	0.348891927	3.258019169	0.001121928	0.005106827	Spag5
ENSMUSG00000000157	18.09112748	2.09112547	0.64252362	3.254550348	0.00113572	0.005163669	Itgb2l
ENSMUSG000000102269	10.1700517	3.096033091	0.951541096	3.253704022	0.001139109	0.005177328	NA
ENSMUSG00000056310	636.9961885	0.913682041	0.280886386	3.252852703	0.001142527	0.005189651	Tyw1
ENSMUSG00000021958	244.5642661	1.008720957	0.310194556	3.251897677	0.001146373	0.005204134	Pinx1
ENSMUSG00000048612	1472.689152	1.159922496	0.356797105	3.250930233	0.001150281	0.00521988	Myof
ENSMUSG00000025066	1701.190512	0.578756316	0.178040725	3.250696247	0.001151228	0.00522318	Sfr1
ENSMUSG00000031283	327.0827482	1.534585688	0.472139027	3.250283497	0.0011529	0.005229519	Chrdl1
ENSMUSG00000036459	791.9628926	0.993928444	0.305801295	3.250242759	0.001153065	0.005229519	Wtip
ENSMUSG00000020514	501.5099284	0.839998387	0.2585141	3.249332963	0.00115676	0.005245274	Mrpl22
ENSMUSG00000026727	709.6963543	0.710190378	0.21857104	3.249242803	0.001157127	0.005245935	Rsu1
ENSMUSG00000022849	309.7565639	0.898521241	0.276540156	3.249152874	0.001157493	0.005246593	Hspbap1
ENSMUSG000000054871	172.7212127	1.04934187	0.323006828	3.248667769	0.001159468	0.005254545	Tmem158
ENSMUSG00000030123	674.3404737	1.360131029	0.418981607	3.246278614	0.001169243	0.005292787	Plxnd1
ENSMUSG00000032502	30.31424226	2.269523126	0.699185916	3.245950861	0.00117059	0.005297875	Stac
ENSMUSG00000029911	782.4501618	0.72022554	0.221897366	3.245759761	0.001171376	0.005298404	Ssbp1
ENSMUSG00000030677	614.3434411	1.294619311	0.398863687	3.2457688	0.001171339	0.005298404	Kif22
ENSMUSG00000079657	9.967730547	1.896191267	0.584202077	3.245779744	0.001171294	0.005298404	Rab26
ENSMUSG00000023191	299.259241	1.286317347	0.396648434	3.242965904	0.001182924	0.005344529	P3h3
ENSMUSG00000029623	2775.322144	0.664930302	0.205054256	3.242704231	0.001184011	0.005348423	Pdap1
ENSMUSG00000021986	9.383614147	2.439415285	0.752475928	3.24185159	0.001187558	0.00536241	Amer2
ENSMUSG00000045594	1966.701607	0.784598493	0.242065992	3.241258652	0.001190032	0.005372556	Glb1
ENSMUSG00000036256	3636.509129	1.306965131	0.403290114	3.240756677	0.001192129	0.005380698	Igfbp7
ENSMUSG00000013083	56.24305266	1.563006127	0.482325746	3.240561256	0.001192946	0.005382647	2200002J24Rik
ENSMUSG00000021265	146.5488114	0.936878002	0.289125686	3.240383157	0.001193692	0.005384987	Slc25a29
ENSMUSG00000024679	650.8063985	1.858368022	0.573666445	3.239457423	0.001197573	0.005399422	Ms4a6d
ENSMUSG00000020755	1189.44431	0.60523138	0.186837569	3.239345193	0.001198045	0.005400522	Sap30bp
ENSMUSG00000001566	55.84009485	1.326363514	0.409561736	3.238494707	0.001201623	0.005414595	Mnx1
ENSMUSG00000014601	1778.897516	1.03975715	0.321092575	3.23818497	0.001202928	0.005419449	Strip1
ENSMUSG00000015094	2375.182531	0.939755085	0.290224698	3.238025889	0.001203599	0.005421444	Npdc1
ENSMUSG00000021701	671.426776	1.227456296	0.379125883	3.237595619	0.001205415	0.005426539	Plk2
ENSMUSG00000011267	36.46839868	1.497623499	0.462588842	3.237482968	0.001205891	0.005427654	Zfp296
ENSMUSG00000059498	1192.461218	1.707757236	0.527542142	3.237195852	0.001207105	0.005432088	Fcgr3
ENSMUSG00000022783	6.669269497	2.632848396	0.813807271	3.235223485	0.001215476	0.005466648	Spag6l
ENSMUSG00000058152	14.06888142	1.504682631	0.465198352	3.234496906	0.001218572	0.005477466	Chsy3
ENSMUSG00000041168	2602.691744	0.741403446	0.229233116	3.234277229	0.00121951	0.005480644	Lonp1
ENSMUSG00000053702	162.0183252	1.494424492	0.462071382	3.234185345	0.001219903	0.005481371	Nebi
ENSMUSG00000075602	3953.210063	1.614237587	0.499181158	3.233771072	0.001221673	0.005487251	Ly6a
ENSMUSG00000007216	150.2538745	1.03026802	0.31863419	3.233388174	0.001223312	0.005492535	Zfp775
ENSMUSG00000086968	357.6763197	1.125630565	0.348184165	3.232859728	0.001225577	0.005501665	4933431E20Rik
ENSMUSG00000106219	31.72580946	1.72522185	0.533800813	3.231958079	0.001229451	0.005516969	5830416I19Rik
ENSMUSG00000039356	808.0277784	0.858920958	0.26585833	3.230746835	0.001234672	0.005536217	Exosc2
ENSMUSG000000001785	761.3438396	0.75252064	0.233019717	3.229429037	0.001240377	0.005558647	Pwp1
ENSMUSG00000053510	2917.042621	0.424026852	0.131309768	3.229210267	0.001241326	0.005561852	Nrd1
ENSMUSG00000020256	117.943673	1.662319688	0.51504698	3.227510793	0.001248723	0.005590779	Aldh1l2
ENSMUSG00000026643	770.001683	0.615764147	0.190784184	3.227542949	0.001248583	0.005590779	Nmt2
ENSMUSG00000022075	408.79007	0.644447114	0.199717174	3.226798682	0.001251835	0.005603654	Rhobtb2
ENSMUSG00000026676	517.8076313	1.862803882	0.577346537	3.226491827	0.001253178	0.005608609	Ccdc3



ENSMUSG00000089665	22.06986404	1.675140082	0.519236139	3.226162347	0.001254622	0.005614013	Fcor
ENSMUSG00000062604	655.2743987	0.853839817	0.264717231	3.225478802	0.001257621	0.005624258	SrpK2
ENSMUSG00000052997	2384.07556	0.689606153	0.21381402	3.225261621	0.001258576	0.005627467	Uba2
ENSMUSG00000030862	197.474592	1.425084363	0.442065503	3.223695028	0.001265481	0.005657276	Cpxm2
ENSMUSG00000034205	1224.488586	1.515312757	0.470065175	3.223622676	0.001265801	0.005657641	NA
ENSMUSG00000081979	6.37166747	2.76620568	0.858169771	3.22337814	0.001266882	0.005660394	NA
ENSMUSG00000035356	1574.270534	1.308704391	0.406171233	3.222050914	0.001272765	0.005683423	Nfkbi
ENSMUSG00000005566	5633.785257	0.701671366	0.217824905	3.221263263	0.001276269	0.005696139	Trim28
ENSMUSG00000029642	2765.138286	0.684898935	0.212619063	3.221248952	0.001276332	0.005696139	Polr1d
ENSMUSG00000057133	881.9910578	0.726140548	0.22544696	3.220893057	0.001277918	0.005701075	Chd6
ENSMUSG00000030726	915.7673734	0.924363998	0.287037086	3.220364345	0.001280278	0.005708385	Pold3
ENSMUSG00000032251	73.6986058	0.883969967	0.274491987	3.220385325	0.001280184	0.005708385	Irak1bp1
ENSMUSG00000067367	739.0399004	1.062271244	0.329899573	3.219983685	0.001281979	0.005714898	Lyar
ENSMUSG00000030007	6204.739438	0.692066544	0.214971582	3.219339674	0.001284862	0.005724527	Cct7
ENSMUSG00000078713	1469.111024	1.014041998	0.315050501	3.218664926	0.001287889	0.005734787	NA
ENSMUSG00000032103	370.5610029	0.791492851	0.245936049	3.218287256	0.001289586	0.005740905	Pus3
ENSMUSG00000041396	108.6419417	0.737392355	0.229180306	3.217520593	0.001293037	0.005754477	Mettl18
ENSMUSG00000065232	3.068766348	3.087705254	0.959796597	3.217041259	0.0012952	0.005760862	NA
ENSMUSG00000032078	991.2023675	0.668838389	0.207928243	3.216678879	0.001296837	0.005766631	Zpr1
ENSMUSG00000071644	7752.47811	0.633680408	0.197014865	3.216409117	0.001298056	0.005769247	Eef1g
ENSMUSG00000020940	24.069978	1.722068112	0.535473496	3.215972641	0.001300032	0.005774788	1700023F06Rik
ENSMUSG000000045269	169.2627757	0.689600964	0.214483538	3.215169655	0.001303674	0.005789884	Apex2
ENSMUSG00000020159	7.065444253	3.244093873	1.009159036	3.21465077	0.001306033	0.005799275	Gabrp
ENSMUSG00000027276	399.8146536	0.731554472	0.227640707	3.213636439	0.001310655	0.005816537	Jag1
ENSMUSG00000057363	790.5019874	0.730847464	0.227484656	3.212733015	0.001314784	0.00582833	Uxs1
ENSMUSG00000058252	5.428199767	2.587800129	0.806507883	3.208648278	0.001333605	0.005907351	Tcp11x2
ENSMUSG00000025355	431.5392621	1.688907742	0.526533259	3.207599356	0.001338478	0.005926726	Mmp19
ENSMUSG00000040569	4.092290069	3.212913631	1.002124054	3.206103694	0.001345455	0.005953181	Slc26a7
ENSMUSG00000085492	184.8668107	0.895656811	0.279379269	3.205881433	0.001346495	0.005956671	Trmt61b
ENSMUSG00000080301	821.9068518	0.71152124	0.222024442	3.204697795	0.001352044	0.00597788	Phax
ENSMUSG00000053469	45.09367537	1.719635041	0.536707555	3.204044785	0.001355114	0.005989226	Tg
ENSMUSG000000045498	13.63996085	1.979696432	0.617885767	3.20398452	0.001355398	0.005989365	Pcdh3b
ENSMUSG00000091586	57.3419383	1.1296532	0.35263106	3.203498868	0.001357686	0.00599763	Cyp4f17
ENSMUSG00000026582	14.28215066	2.827741897	0.882767592	3.203268814	0.001358771	0.006000922	Sele
ENSMUSG00000049807	471.7876168	0.86138898	0.268921673	3.203122197	0.001359463	0.006002862	Arhgap23
ENSMUSG00000027611	417.78531	1.189501275	0.37161318	3.200912508	0.001369931	0.006045715	Procr
ENSMUSG00000037029	535.5043748	0.72046055	0.22508817	3.200792608	0.001370501	0.006047108	NA
ENSMUSG00000045969	966.0783648	0.462553129	0.14453338	3.200320438	0.001372749	0.006054775	Ing1
ENSMUSG00000079669	17.36995182	1.44781059	0.452440465	3.200002435	0.001374264	0.006060334	NA
ENSMUSG00000019539	782.8780763	1.531868824	0.478764223	3.199630949	0.001376037	0.006066231	Rcn3
ENSMUSG00000021044	302.0377369	0.802635208	0.250873723	3.199359413	0.001377333	0.006066852	Adck1
ENSMUSG000000021891	374.9807746	0.585937819	0.183144585	3.199318283	0.00137753	0.006066852	Mettl6
ENSMUSG00000040605	864.5018566	1.152046568	0.360086161	3.199363633	0.001377313	0.006066852	Bace2
ENSMUSG00000044201	127.8041966	1.325372665	0.414263849	3.199344252	0.001377406	0.006066852	Cdc25c
ENSMUSG00000024251	241.6452426	0.814919849	0.254835315	3.197829345	0.001384662	0.006094873	Thada
ENSMUSG00000056820	1895.535725	0.529581172	0.165603743	3.197881661	0.001384411	0.006094873	Tsnax
ENSMUSG00000086320	3303.342857	2.074658402	0.64894955	3.196948672	0.001388896	0.006112379	NA
ENSMUSG00000028173	2264.594728	1.313741223	0.411111887	3.195580727	0.001395497	0.006137429	Wls
ENSMUSG00000040269	555.3022725	0.976148167	0.305489935	3.195352956	0.001396599	0.006140591	Mrps28
ENSMUSG00000021978	1356.818918	0.691078936	0.216285907	3.195210199	0.00139729	0.006141356	Extl3
ENSMUSG00000037761	330.1667976	0.847258649	0.265181861	3.195009811	0.001398261	0.006144485	Actr5
ENSMUSG00000019188	4913.877753	0.555002026	0.173718389	3.194837525	0.001399096	0.006147017	H13
ENSMUSG00000048481	72.47162242	1.248455786	0.39096891	3.193235458	0.001406882	0.00617894	Mypop
ENSMUSG00000022544	470.0076816	0.801852739	0.251271891	3.191175653	0.001416951	0.006213188	Eef2kmt
ENSMUSG00000026580	302.1392037	2.030004871	0.636134082	3.191158797	0.001417034	0.006213188	Selp
ENSMUSG00000028086	608.5514765	0.623083193	0.195309726	3.190231253	0.00142159	0.006232015	Fbxw7
ENSMUSG00000026923	742.8429678	0.680878664	0.213507966	3.189008239	0.001427618	0.006254979	Notch1
ENSMUSG00000069792	883.5548776	2.176990459	0.68288518	3.187930447	0.00143295	0.006276025	Wfcd17
ENSMUSG00000059713	834.7920141	0.888762125	0.278795856	3.187859887	0.0014333	0.0062764	Rcan3
ENSMUSG00000029507	986.2275478	0.71837547	0.225357389	3.187716517	0.001434011	0.006278355	Pus1
ENSMUSG00000022516	906.7676909	0.887439187	0.278410818	3.187516892	0.001435001	0.006279219	Nudt16l1
ENSMUSG000000024640	1067.620906	1.509070477	0.473426507	3.187549609	0.001434838	0.006279219	Psat1
ENSMUSG00000108022	5.118784059	3.514106649	1.103420199	3.184740185	0.00144884	0.006333482	NA
ENSMUSG00000022792	332.404159	1.23015754	0.386517025	3.182673623	0.00145922	0.006373457	Yars2
ENSMUSG00000024539	1186.148872	0.749898078	0.235686772	3.181757181	0.001463845	0.006392482	Ptpn2
ENSMUSG00000025489	14.76367408	1.384374798	0.435364729	3.179804665	0.001473744	0.006428618	Ifitm5
ENSMUSG00000042063	652.2149834	0.697883367	0.219562388	3.178519654	0.001480292	0.006452443	Zfp386

ENSMUSG00000091955	7.813007051	1.934856362	0.608781158	3.178246135	0.001481689	0.006456164	NA
ENSMUSG00000021253	464.4718197	1.321123411	0.415832667	3.177055379	0.001487786	0.006480354	Tgfb3
ENSMUSG00000070814	154.2966221	0.914925861	0.288065628	3.176102157	0.001492684	0.006499303	6330408A02Rik
ENSMUSG00000003438	1385.022324	0.784339391	0.246978496	3.175739611	0.00149455	0.006506238	Timm50
ENSMUSG00000028678	306.2197985	1.215002171	0.382736041	3.174517265	0.00150086	0.006530114	Kif2c
ENSMUSG00000037058	2128.277061	0.637318169	0.200772902	3.174323646	0.001501861	0.006532079	Paip2
ENSMUSG00000070526	15.70144196	1.964130037	0.618747903	3.174362332	0.001501661	0.006532079	Peg12
ENSMUSG00000030689	865.496134	0.469858304	0.148075802	3.173093092	0.001508242	0.006557428	Ino80e
ENSMUSG00000060314	37.97671696	1.146387233	0.36128161	3.173112607	0.00150814	0.006557428	Zfp941
ENSMUSG00000022313	274.860685	0.727534028	0.229427797	3.17108057	0.00151873	0.006600454	Utp23
ENSMUSG00000054893	65.78384899	1.330604541	0.419722576	3.170200072	0.00152334	0.006617017	Zfp667
ENSMUSG00000060512	2361.180719	0.843364139	0.266157238	3.168668816	0.001531388	0.006646935	0610040J01Rik
ENSMUSG00000079497	4.337248473	2.95794253	0.933510251	3.168623511	0.001531627	0.006646935	Gm13420
ENSMUSG00000080115	27.57954816	1.543383518	0.4874355	3.166333838	0.001543735	0.006694591	Mettl21b
ENSMUSG00000049804	208.155503	1.319011282	0.416583417	3.166259693	0.001544129	0.006695076	Armxc4
ENSMUSG00000042747	1173.672615	0.652189014	0.206020869	3.165645389	0.001547393	0.006706782	Krtcap2
ENSMUSG00000054716	345.6737566	0.834687832	0.263705708	3.165224744	0.001549632	0.006715261	Zfp771
ENSMUSG00000069171	86.28148994	1.987829658	0.628083887	3.164911086	0.001551303	0.006721278	Nr2f1
ENSMUSG00000027635	166.1106739	0.915719231	0.289357434	3.164664615	0.001552618	0.00672452	Dsn1
ENSMUSG00000107526	16.76159832	1.334048192	0.421566746	3.16450053	0.001553494	0.006727087	NA
ENSMUSG00000031563	590.6885301	0.845046293	0.267097495	3.163812128	0.001557173	0.006739333	Wwc2
ENSMUSG00000033157	337.7519876	0.82619715	0.26114418	3.163758618	0.001557459	0.006739333	Abhd10
ENSMUSG00000047228	77.2093726	1.637396323	0.5175564	3.163706068	0.00155774	0.006739333	BC048546
ENSMUSG00000022022	119.2909735	0.69125982	0.218513284	3.163468176	0.001559014	0.006743615	Mtrf1
ENSMUSG00000000776	402.2074709	1.018059137	0.321834939	3.163295883	0.001559937	0.00674638	Polr3d
ENSMUSG00000030871	365.763258	0.890379029	0.281494106	3.163046792	0.001561272	0.006750838	Ears2
ENSMUSG00000044533	15954.23089	0.735841344	0.232640501	3.16299759	0.001561536	0.006750838	Rps2
ENSMUSG00000029833	1355.174082	0.836242804	0.26454539	3.161056037	0.001571983	0.006793527	Trim24
ENSMUSG00000026885	26.32757552	1.360202978	0.430359829	3.160617899	0.001574349	0.006801278	Ttll11
ENSMUSG00000027189	1385.056788	0.603955796	0.191093582	3.160523709	0.001574858	0.006802241	Trim44
ENSMUSG00000038570	19.83771461	1.176336283	0.372216465	3.160355312	0.001575768	0.006804937	Saxo2
ENSMUSG000000024737	567.9096324	1.869267323	0.591736248	3.158953555	0.001583367	0.006830302	Slc15a3
ENSMUSG00000026728	6338.950459	1.283369625	0.406257794	3.159003088	0.001583098	0.006830302	Vim
ENSMUSG00000000561	913.6203898	0.814967623	0.25800617	3.158713695	0.001584671	0.006833444	Wdr77
ENSMUSG00000074797	927.1191931	0.750271296	0.23773532	3.155910091	0.001599982	0.006893211	Itpa
ENSMUSG00000057286	1354.903421	1.350491658	0.427933022	3.155848205	0.001600321	0.006893424	St6galnac2
ENSMUSG00000057541	545.2955034	1.010327551	0.320266748	3.154643926	0.001606941	0.006919429	Pus7
ENSMUSG00000025436	78.37693908	0.975872154	0.309373014	3.154354485	0.001608536	0.006925041	Xrccbbp1
ENSMUSG00000024151	899.021776	0.94126877	0.298467999	3.153667304	0.001612328	0.006939549	Msh2
ENSMUSG00000045165	271.638497	1.841768855	0.584014045	3.15363795	0.00161249	0.006939549	Al467606
ENSMUSG00000048065	10.34189059	2.394637455	0.759542102	3.152738274	0.001617468	0.00695971	Cyb5r2
ENSMUSG000000004709	185.5923231	1.407968223	0.446630559	3.152422501	0.001619218	0.006964719	Cd244
ENSMUSG00000029394	372.9200221	0.794220397	0.251938942	3.152432058	0.001619165	0.006964719	Cdk2ap1
ENSMUSG00000026509	2094.736382	0.930939945	0.29547548	3.150650422	0.001629073	0.007005842	Capn2
ENSMUSG00000079109	180.9428444	0.622985882	0.197747237	3.150415104	0.001630386	0.007010219	Pms2
ENSMUSG00000005779	5900.622226	0.604406898	0.191859314	3.150260912	0.001631247	0.00701265	Psmb4
ENSMUSG00000039275	1199.66834	0.535001847	0.169968135	3.147659693	0.001645832	0.00707151	Foxk2
ENSMUSG00000033880	8345.452035	0.624910603	0.198557391	3.147254306	0.001648116	0.007078836	Lgals3bp
ENSMUSG00000053007	127.7839246	1.286977546	0.408921134	3.147251239	0.001648133	0.007078836	Creb5
ENSMUSG00000030663	1728.671235	0.673912944	0.214140954	3.147053057	0.00164925	0.007082355	1110004F10Rik
ENSMUSG00000038900	11720.54261	0.751224918	0.238939685	3.143993924	0.001666589	0.007150494	Rpl12
ENSMUSG00000079560	101.4248251	1.374101064	0.437077039	3.143841795	0.001667456	0.007152776	Hoxa3
ENSMUSG00000085053	2.317428419	3.222932838	1.026073203	3.14103597	0.001683514	0.007216447	NA
ENSMUSG00000030611	453.8568948	0.88639888	0.28223399	3.140652481	0.001685719	0.007224598	Mrps11
ENSMUSG00000026471	209.5150064	0.957866517	0.305012223	3.140420105	0.001687057	0.007227724	Mr1
ENSMUSG00000097339	2.808782092	3.307490077	1.05337565	3.139896083	0.001690078	0.007239359	Gm26671
ENSMUSG00000043282	9.065344158	2.424031772	0.772046293	3.139749253	0.001690925	0.007241683	Teddm1b
ENSMUSG00000032288	1310.562857	0.811678803	0.258587215	3.138897657	0.001695847	0.007260143	Imp3
ENSMUSG00000022247	1406.811966	1.060013711	0.337811333	3.13788677	0.001701706	0.007282603	Brix1
ENSMUSG00000037509	64.12618713	1.103606259	0.351747136	3.137498921	0.001703959	0.007290931	Arhgef4
ENSMUSG00000097828	5.665372376	2.301300867	0.733664188	3.136722364	0.001708478	0.007303691	NA
ENSMUSG00000058569	2977.585066	0.955328274	0.304592127	3.136418148	0.001710252	0.007309957	Tmed9
ENSMUSG00000033701	915.5802076	0.752718538	0.240152631	3.134333919	0.001722447	0.007358111	Acbd6
ENSMUSG00000020227	301.3469566	1.562560291	0.498543725	3.134249242	0.001722944	0.00735856	Irak3
ENSMUSG00000078444	9.278185737	2.103388401	0.671106291	3.134210526	0.001723172	0.00735856	Gm10941
ENSMUSG00000027805	276.8764007	0.793556275	0.253209033	3.133996707	0.001724428	0.007362601	Pfn2
ENSMUSG00000033323	757.2131445	0.577106776	0.184177813	3.133421805	0.001727809	0.007375713	Ctdp1

ENSMUSG00000021102	1393.887563	0.789182288	0.251868384	3.133312233	0.001728455	0.007377141	GlrX5
ENSMUSG00000018666	1427.879133	0.696133317	0.22218829	3.133078333	0.001729833	0.007381697	Cbx1
ENSMUSG00000038510	404.3687763	0.823477147	0.26288297	3.132485706	0.001733329	0.007395287	Rpf2
ENSMUSG00000028567	911.6190219	0.691052108	0.220631616	3.132153589	0.001735291	0.007400999	Txndc12
ENSMUSG00000081564	6.412712192	2.191056799	0.699837692	3.130807078	0.001743266	0.00742968	NA
ENSMUSG00000029844	15.5792608	1.69220336	0.540642918	3.129983404	0.001748162	0.007447872	Hoxa1
ENSMUSG00000045392	261.8584209	1.917683833	0.612809806	3.129329547	0.001752057	0.007463128	Olfir1033
ENSMUSG00000028910	983.4856682	0.824603528	0.263559042	3.128724108	0.001755671	0.007474501	Mecr
ENSMUSG00000020319	132.2667989	0.9228514	0.295028845	3.128003975	0.001759978	0.007491496	Wdpcp
ENSMUSG00000032300	2088.616468	1.040523256	0.332680023	3.127699841	0.0017618	0.007497908	1700017B05Rik
ENSMUSG00000106779	3.823687423	2.843313185	0.909753612	3.125366195	0.001775838	0.007549538	Gm8579
ENSMUSG00000015143	4639.817543	0.6068276	0.194173957	3.125175024	0.001776993	0.007553094	Actn1
ENSMUSG00000028360	63.1106032	2.208101176	0.706731939	3.124382886	0.001781784	0.007568749	Slc44a5
ENSMUSG00000093483	318.0202293	0.924123409	0.295780497	3.124355459	0.00178195	0.007568749	AA465934
ENSMUSG00000039787	153.4803849	1.249487888	0.399928137	3.124281021	0.001782401	0.007569311	Cercam
ENSMUSG00000087400	15.44569467	1.493995004	0.478297228	3.123570273	0.001786712	0.007586199	NA
ENSMUSG00000018921	883.9918593	0.901709168	0.288733884	3.122976614	0.00179032	0.007596149	Pelp1
ENSMUSG00000050359	554.8254818	1.775917057	0.568724843	3.122629648	0.001792431	0.00760375	Sprr1a
ENSMUSG00000008028	10.05767677	1.697449849	0.543701802	3.122023583	0.001796126	0.007615341	1700008O03Rik
ENSMUSG00000025200	278.4464747	0.566170261	0.181371378	3.121607541	0.001798665	0.00762067	Cwf19l1
ENSMUSG00000070319	2567.714678	0.703497317	0.2254327	3.120653375	0.001804503	0.007644039	Eif3g
ENSMUSG00000039262	3193.818301	0.72879762	0.233629503	3.119458843	0.001811836	0.007673733	Prcc2b
ENSMUSG00000040658	245.1550994	1.304975075	0.418356546	3.119289243	0.001812879	0.007676783	Dnph1
ENSMUSG00000040620	528.9011395	0.670475714	0.215023386	3.118152523	0.001819886	0.007705081	Dhx33
ENSMUSG00000019102	35.44320686	2.472030797	0.793250362	3.116331132	0.001831165	0.007741798	Aldh3a1
ENSMUSG00000096225	5.528658979	2.845318518	0.913227575	3.115673022	0.001835256	0.007757714	Lhx8
ENSMUSG00000089255	12.00018177	1.891786814	0.607525118	3.11392362	0.001846173	0.007801081	Snora78
ENSMUSG00000060152	702.5240057	0.681026742	0.218751315	3.113246387	0.001850415	0.007817615	Pop5
ENSMUSG00000062148	2.94960664	3.055478041	0.981488416	3.113106576	0.001851292	0.007818539	NA
ENSMUSG00000029014	1306.838376	0.803639885	0.25817767	3.112739711	0.001853594	0.007826872	Dnajc2
ENSMUSG00000021115	585.6353723	0.981364795	0.315376635	3.111723211	0.001859988	0.007849685	Vrk1
ENSMUSG000000061535	96.53344502	1.522561547	0.489475315	3.110599247	0.001867081	0.007875424	C1qtnf7
ENSMUSG00000079186	9.292366298	2.195811449	0.705956791	3.110404884	0.001868311	0.007879209	Gzmc
ENSMUSG00000027018	755.0806138	0.957341367	0.30779328	3.110338749	0.001868729	0.007879575	Hat1
ENSMUSG00000027454	174.4199185	1.401257447	0.450538594	3.110182937	0.001869715	0.007882334	Gins1
ENSMUSG00000029191	1258.394306	0.724829441	0.233084457	3.109728764	0.001872592	0.007890262	Rfc1
ENSMUSG00000029554	513.8978875	0.861860525	0.277145595	3.109775299	0.001872297	0.007890262	Mad1l1
ENSMUSG00000035754	778.791999	0.738515154	0.237569579	3.10862677	0.00187959	0.007918343	Wdr18
ENSMUSG00000028907	689.6302991	0.63936802	0.205776442	3.107100186	0.001889324	0.007955117	Utp11l
ENSMUSG00000002769	59.30648022	1.808121439	0.581991475	3.106783372	0.001891349	0.007962236	Gnmt
ENSMUSG00000087032	3.100016044	3.075377783	0.990113897	3.106084857	0.001895823	0.007975829	NA
ENSMUSG000000027075	162.2409772	1.418284141	0.456694582	3.105541858	0.001899307	0.007988659	Slc43a1
ENSMUSG00000022474	886.7085403	0.861549202	0.277488159	3.104814295	0.001903985	0.008006917	Pmm1
ENSMUSG00000026247	7.519628812	2.500339135	0.80550878	3.104049511	0.001908914	0.008023241	Ecel1
ENSMUSG00000022698	3065.500639	1.120614737	0.361091761	3.103407104	0.001913063	0.008037929	Naa50
ENSMUSG00000063594	13.92327956	1.475571099	0.47548634	3.103288098	0.001913832	0.008038367	Gng8
ENSMUSG00000006241	29.18590435	1.242014178	0.400330673	3.102470688	0.001919126	0.008057122	Ccdc159
ENSMUSG00000049643	404.838112	0.597825643	0.192762684	3.101355679	0.001926367	0.00808387	2310022A10Rik
ENSMUSG00000044646	214.0486487	1.004080201	0.323768854	3.101225425	0.001927215	0.00808592	Zbtb7c
ENSMUSG00000054115	187.4817198	1.070563971	0.345271251	3.100646142	0.001930989	0.008098972	Skp2
ENSMUSG00000023982	32.0925459	1.107058692	0.357107603	3.100070351	0.001934747	0.0081133	Guca1a
ENSMUSG00000039357	347.3109354	0.588102125	0.189725754	3.099748522	0.00193685	0.008120687	Fut11
ENSMUSG00000036983	134.5785093	1.131430041	0.365080048	3.099128663	0.001940907	0.008134825	Tfb1m
ENSMUSG00000072945	22.6670756	2.051874287	0.662417222	3.097555768	0.001951237	0.008175235	Ripply1
ENSMUSG00000019139	1132.219278	1.126072702	0.363598664	3.097021006	0.00195476	0.008187109	Isyna1
ENSMUSG00000027395	711.7282842	0.827880022	0.267328491	3.096864157	0.001955795	0.008189998	Polr1b
ENSMUSG00000041135	222.5961645	0.752628117	0.243042434	3.096694282	0.001956916	0.008193248	Ripk2
ENSMUSG00000106536	23.51940668	1.486984855	0.48024147	3.096327469	0.001959338	0.008200501	NA
ENSMUSG00000027750	1982.931641	2.027748732	0.65494906	3.096040373	0.001961237	0.008204109	Postn
ENSMUSG00000069662	1758.600864	0.867864094	0.280312512	3.096059072	0.001961113	0.008204109	Marcks
ENSMUSG00000087088	53.35692875	1.334314541	0.431187584	3.094510582	0.001971379	0.008240732	NA
ENSMUSG00000028982	507.875227	1.436299604	0.464216045	3.09403266	0.001974557	0.008251758	Slc25a33
ENSMUSG00000082163	38.97009675	1.034837608	0.334464905	3.094009548	0.001974711	0.008251758	NA
ENSMUSG00000063651	4.57022753	3.415085469	1.103835659	3.093835065	0.001975873	0.00825516	Cnfn
ENSMUSG00000063558	75.17517648	1.132887409	0.366328305	3.092546751	0.00198447	0.008286705	Aox1
ENSMUSG00000094634	6.332380659	2.040038472	0.659706372	3.092343135	0.001985832	0.008290934	NA
ENSMUSG00000067924	108.9803291	0.804807782	0.260319385	3.091616794	0.001990697	0.008309785	Cxx1b

ENSMUSG00000042249	739.2004265	1.060778165	0.343129318	3.091482157	0.0019916	0.008312094	Grk3
ENSMUSG00000005057	110.6296242	1.49927543	0.485099535	3.090655258	0.001997154	0.008332347	Sh2b2
ENSMUSG00000037544	256.403744	1.111910039	0.359779719	3.090530069	0.001997996	0.008333617	Dlgap5
ENSMUSG00000038079	202.372078	0.715505766	0.231517375	3.09050569	0.00199816	0.008333617	Tmem237
ENSMUSG00000022360	516.3619633	1.176741236	0.380996746	3.088586052	0.002011114	0.008384702	Atad2
ENSMUSG00000032769	42.93538262	1.500890938	0.486113198	3.087533818	0.002018248	0.008411491	Trpa1
ENSMUSG00000110686	16.2559809	1.367014971	0.443024106	3.08564467	0.002031114	0.00846066	NA
ENSMUSG00000001524	426.8577985	0.855197561	0.277179859	3.085352459	0.002033111	0.008467492	Gtf2h4
ENSMUSG00000008912	7.706616441	2.460891592	0.797625135	3.085273373	0.002033651	0.00846826	NA
ENSMUSG00000033644	78.78448613	1.512419795	0.490216541	3.085207596	0.002034101	0.008468649	Piwi12
ENSMUSG00000047751	2.334958567	3.197628189	1.036755044	3.084265863	0.002040552	0.008491039	Utf1
ENSMUSG00000038736	439.0369973	0.946522745	0.307032641	3.082808211	0.002050573	0.008525272	Nudcd1
ENSMUSG00000090104	5769.030422	1.736167112	0.563470699	3.081202119	0.002061666	0.008565399	NA
ENSMUSG00000022621	121.7038446	1.103456638	0.358212949	3.080448772	0.002066889	0.008584094	Rab12
ENSMUSG00000028684	1201.571596	0.780796246	0.25351049	3.079936642	0.002070446	0.008597365	Urod
ENSMUSG00000097305	5.356329275	2.719663986	0.883238071	3.079196962	0.002075594	0.008616825	NA
ENSMUSG00000035385	457.2898985	2.082719075	0.676418453	3.079039413	0.002076692	0.00861878	Ccl2
ENSMUSG00000048728	17.140122	2.072632824	0.673186519	3.078838872	0.00207809	0.008623077	Zfp454
ENSMUSG00000091625	346.0565589	1.006233845	0.326899662	3.078112222	0.002083165	0.008642622	NA
ENSMUSG00000000276	311.7550843	0.656676584	0.213357184	3.077827384	0.002085157	0.008649377	Dgke
ENSMUSG00000028583	567.318732	1.596370436	0.518702698	3.077621232	0.002086599	0.008653851	Pdpn
ENSMUSG000000046364	8763.362953	0.732238962	0.327947429	3.077314028	0.002088751	0.008661263	Rpl27a
ENSMUSG00000041199	220.4143797	0.784934636	0.255080451	3.077204199	0.002089521	0.008662943	Rpusd1
ENSMUSG00000020612	6795.196085	0.465216812	0.1511989	3.076853145	0.002091983	0.008671638	Prkar1a
ENSMUSG00000028577	1825.88132	0.648941662	0.210961938	3.076107796	0.00209722	0.008691828	Plaa
ENSMUSG00000055835	267.7129729	0.734448791	0.238869991	3.07468003	0.002107285	0.008732018	Zfp1
ENSMUSG00000024359	10831.53872	0.960296825	0.312428479	3.073653298	0.00211455	0.008760595	Hspa9
ENSMUSG00000031068	1774.897105	0.628287461	0.204502917	3.072266494	0.0021244	0.008799867	Glr3
ENSMUSG00000066037	1572.144094	0.551161308	0.17941216	3.072039866	0.002126013	0.008805016	Hnrnp1
ENSMUSG00000030217	30.21815242	1.232155929	0.401125542	3.071746372	0.002128105	0.008812141	Art4
ENSMUSG00000045257	95.58818011	1.339725703	0.436265901	3.070892547	0.002134199	0.008835838	Morn2
ENSMUSG000000086298	2.351037915	3.191582894	1.039538662	3.070191624	0.002139215	0.008853516	NA
ENSMUSG00000023039	7731.405486	1.334072276	0.434700391	3.068946574	0.00214815	0.0088874	Krt7
ENSMUSG00000075028	189.9960019	0.967005211	0.315111359	3.068772939	0.002149399	0.008891019	Prdm11
ENSMUSG00000038489	160.9863427	0.94680914	0.308537113	3.068704224	0.002149893	0.008891515	Polr2l
ENSMUSG00000051817	275.2161888	1.096037797	0.357244249	3.068034824	0.002154715	0.008907838	Sox12
ENSMUSG00000032875	771.1859977	1.01712544	0.33154324	3.067851537	0.002156037	0.00891072	Arhgef17
ENSMUSG00000038722	2058.377814	0.735599065	0.239829484	3.067175283	0.002160921	0.008929351	NA
ENSMUSG00000079036	505.664879	0.633253932	0.206546148	3.065919834	0.002170015	0.00896381	NA
ENSMUSG00000087484	20.75953859	1.219223175	0.397737748	3.065394677	0.002173829	0.008976445	NA
ENSMUSG00000098098	105.1847046	1.39147222	0.453925819	3.065417656	0.002173662	0.008976445	Bvht
ENSMUSG00000000392	85.99469376	1.237836996	0.40392272	3.06453917	0.002180056	0.008995903	Fap
ENSMUSG00000073775	616.3255522	0.828014519	0.270202183	3.064425717	0.002180883	0.008997753	Kti12
ENSMUSG00000089953	2.115041552	3.13492409	1.023184791	3.063888475	0.002184803	0.009009233	Rnf224
ENSMUSG00000022814	662.0133884	0.855848468	0.279370703	3.063486823	0.002187738	0.00901977	Umps
ENSMUSG00000018583	3789.380216	0.780224777	0.254794971	3.062167104	0.002197407	0.009053349	G3bp1
ENSMUSG00000060216	956.1979797	1.212240769	0.395893389	3.062038427	0.002198352	0.009055671	Arrb2
ENSMUSG00000053821	3.841950923	2.566289056	0.838219126	3.061596874	0.002201597	0.009065895	NA
ENSMUSG00000026497	7.718824203	3.005182168	0.981686744	3.061243504	0.002204198	0.009075029	Mix1
ENSMUSG00000029534	365.2579663	0.833514548	0.272331252	3.060664327	0.002208465	0.009091025	St7
ENSMUSG00000059013	403.5474546	1.484929682	0.4854037	3.059164327	0.002219554	0.009131922	Sh2d3c
ENSMUSG00000025817	815.5092178	0.906434836	0.296405277	3.058092773	0.002227506	0.009159881	Nudt5
ENSMUSG00000078789	185.7671934	0.797540948	0.260840599	3.057579806	0.002231322	0.009171505	Dph1
ENSMUSG00000087413	24.71804921	1.755668432	0.574193015	3.057627639	0.002230966	0.009171505	NA
ENSMUSG00000029730	1819.141544	1.119614335	0.366277333	3.056739344	0.002237588	0.009193381	Mcm7
ENSMUSG00000039737	432.3989422	0.818136222	0.267683059	3.056361595	0.002240409	0.009203381	Prkrip1
ENSMUSG00000022248	309.0662001	0.953600537	0.312024003	3.056176858	0.00224179	0.009207462	Rad1
ENSMUSG000000002835	630.4066213	1.008773438	0.330141142	3.055582321	0.002246239	0.009224142	Chaf1a
ENSMUSG00000020571	6932.675823	1.309946537	0.428765065	3.05516154	0.002249393	0.009235497	Pdia6
ENSMUSG00000025869	671.3467673	0.625393684	0.204707104	3.055065855	0.002250111	0.009236848	Nop16
ENSMUSG00000004356	363.0310494	0.95622883	0.313006047	3.054985165	0.002250717	0.009237737	Utp20
ENSMUSG000000011305	66.50698224	1.490130047	0.487825682	3.05463632	0.002253336	0.00924689	Plin5
ENSMUSG00000032040	466.363361	1.028904121	0.336852073	3.054468726	0.002254595	0.009250049	Dcps
ENSMUSG00000004929	937.8655962	0.817813331	0.267822694	3.053562491	0.002261416	0.00927204	Thop1
ENSMUSG00000018548	556.2099017	0.924274912	0.302876031	3.051660805	0.002275791	0.00932615	Trim37
ENSMUSG00000025592	25.34325265	1.875209849	0.614523107	3.051487941	0.002277102	0.009329913	Dach2
ENSMUSG000000027132	351.8234375	0.834901629	0.273643891	3.051051586	0.002280414	0.009340261	Katnbl1



ENSMUSG00000105247	51.78681321	0.900397158	0.295215024	3.049970645	0.002288637	0.009367483	NA
ENSMUSG00000057060	11.69267713	2.3360143	0.765961727	3.049779404	0.002290095	0.009371834	Slc35f3
ENSMUSG00000002870	1251.300626	1.345757456	0.441444142	3.048533954	0.002299609	0.009404289	Mcm2
ENSMUSG00000005078	504.284787	0.49667613	0.162962926	3.047786039	0.00230534	0.009422859	Ikamp
ENSMUSG00000024018	170.0642907	1.305894917	0.42849884	3.047604325	0.002306734	0.009426937	Ccdc167
ENSMUSG00000022403	2768.634271	0.719188541	0.235992291	3.047508623	0.002307469	0.009428317	Stt13
ENSMUSG00000062867	1669.539313	0.803157905	0.263615458	3.04670261	0.002313665	0.009451425	Impdh2
ENSMUSG00000054951	208.9838847	1.028681452	0.33773288	3.045843369	0.002320287	0.009470916	9130008F23Rik
ENSMUSG00000031574	137.2933352	2.01144082	0.660512789	3.045271572	0.002324703	0.00948669	Star
ENSMUSG00000044581	2.135046782	3.134009994	1.029150538	3.045239622	0.00232495	0.00948669	NA
ENSMUSG00000048445	131.6132653	0.694089625	0.22797393	3.04460087	0.002329893	0.009503595	Ccdc57
ENSMUSG00000081755	8.552210124	1.873235895	0.615437175	3.043748367	0.002336505	0.009525658	NA
ENSMUSG00000024181	1800.473995	0.753239969	0.247531936	3.043001159	0.002342314	0.009544429	Mrpl28
ENSMUSG00000098843	2.48474872	3.200727359	1.051988121	3.042550858	0.002345822	0.009557081	NA
ENSMUSG00000022634	366.4657316	0.823689312	0.270766329	3.042066989	0.002349596	0.009567536	Yaf2
ENSMUSG00000027800	652.6552918	1.329277401	0.437033681	3.041590288	0.00235332	0.009577774	Tm4sf1
ENSMUSG00000024970	591.9765026	0.590858528	0.194282227	3.041238188	0.002356074	0.009587339	Al846148
ENSMUSG00000046731	284.4042884	1.442649188	0.474503645	3.040333207	0.002363165	0.009613928	Kctd11
ENSMUSG00000019789	62.94438903	1.760859124	0.579392406	3.039147745	0.002372485	0.009645858	Hey2
ENSMUSG00000027722	330.8229916	0.797623514	0.26253372	3.03817549	0.002380153	0.009667108	Spata5
ENSMUSG00000043872	167.1999546	0.705133874	0.232089561	3.038197283	0.002379981	0.009667108	Zmym1
ENSMUSG00000074344	3.5289728	2.740169916	0.901886925	3.038263267	0.00237946	0.009667108	Tmigd3
ENSMUSG00000026429	123.2606792	1.254008883	0.412796663	3.037836777	0.00238283	0.009674672	Ube2t
ENSMUSG00000009293	1003.106433	0.432364902	0.142340413	3.037541435	0.002385166	0.009682503	Ube2g2
ENSMUSG00000024033	36.09011541	1.27199059	0.418805011	3.037190477	0.002387945	0.009692128	Rsph1
ENSMUSG00000020871	17.91042687	2.593589224	0.854054866	3.03679462	0.002391083	0.009699102	Dlx4
ENSMUSG00000060063	960.0939878	1.783316914	0.58724179	3.036767722	0.002391296	0.009699102	Alox5ap
ENSMUSG00000059540	125.0461256	1.225894919	0.403784865	3.036010075	0.002397314	0.009719248	Tcea2
ENSMUSG00000020216	5.427379414	2.603216071	0.857657846	3.035261768	0.00240327	0.009737691	Jsrp1
ENSMUSG00000085835	3.660851216	2.793097131	0.920215289	3.03526486	0.002403245	0.009737691	NA
ENSMUSG00000057933	14.20520515	1.807377525	0.595492546	3.035096806	0.002404585	0.009739293	Gsta2
ENSMUSG000000101172	5.2867197	2.300651326	0.758005702	3.035137228	0.002404263	0.009739293	Gm28535
ENSMUSG00000106086	6.664684923	2.570078421	0.847168834	3.033726357	0.002415534	0.009780711	NA
ENSMUSG00000026765	42.60226562	1.946889817	0.641766727	3.033640941	0.002416218	0.009781813	Lypd6b
ENSMUSG00000022514	403.1056205	1.312322261	0.432616152	3.033456461	0.002417696	0.009784461	Il1rap
ENSMUSG00000025742	950.9697058	0.850746135	0.28050351	3.032925096	0.002421957	0.009793364	Prps2
ENSMUSG00000033460	120.370471	1.014621847	0.334568658	3.032626702	0.002424353	0.009801384	Armxc1
ENSMUSG00000026238	11516.44683	1.102484792	0.3636196	3.031972954	0.00242961	0.009817623	Ptma
ENSMUSG00000090192	3.204037093	3.020951109	0.997400817	3.028823575	0.00245508	0.009912115	NA
ENSMUSG00000026049	249.7032412	1.059457238	0.34983425	3.028454871	0.002458078	0.009918179	Tex30
ENSMUSG00000034401	298.7734747	1.026923254	0.339093881	3.028433454	0.002458252	0.009918179	Spata6
ENSMUSG000000046711	1003.928109	1.084126807	0.3580033	3.028259258	0.00245967	0.009922213	Hmga1
ENSMUSG00000030649	511.3599956	0.798207997	0.263595342	3.028156681	0.002460505	0.009923897	Anapc15
ENSMUSG00000024309	1114.531863	0.681399074	0.225068278	3.027521605	0.002465681	0.009943085	Pfdn6
ENSMUSG00000020930	18.3276187	1.940089376	0.640973095	3.026787536	0.002471676	0.009963879	Ccdc103
ENSMUSG00000024030	332.5375414	1.162791209	0.384345949	3.025376515	0.002483238	0.010008788	Abcg1
ENSMUSG00000028333	5176.470447	0.774292717	0.255969186	3.024945025	0.002486783	0.010019257	Anp32b
ENSMUSG00000031775	1409.336346	1.148815045	0.379785314	3.024906446	0.0024871	0.010019257	Pilp
ENSMUSG00000051510	3009.172358	0.948930342	0.313700519	3.024956242	0.002486691	0.010019257	Mafg
ENSMUSG00000020697	759.7403573	0.612372313	0.20249993	3.024061855	0.002494054	0.010043864	Lig3
ENSMUSG00000016503	1042.426781	0.842089875	0.278539782	3.023230175	0.002500919	0.010068076	Gtf3a
ENSMUSG00000043953	225.7113661	1.865710182	0.617135089	3.023179551	0.002501338	0.010068076	Ccr12
ENSMUSG00000059796	9332.524736	0.75897941	0.251114704	3.022441124	0.002507449	0.010089253	Eif4a1
ENSMUSG00000039033	196.9823953	0.639929956	0.211766499	3.021865878	0.002512218	0.010106733	Tasp1
ENSMUSG00000022309	42.06327308	1.699855924	0.562557998	3.021654529	0.002513973	0.010112079	Angpt1
ENSMUSG00000010755	1029.29336	0.99518681	0.329364608	3.021535366	0.002514963	0.010114348	Cars
ENSMUSG00000026602	3.915957963	2.788510369	0.923029443	3.021041625	0.002519067	0.010129141	Nphs2
ENSMUSG00000031948	3012.426337	0.510748461	0.169066935	3.020983745	0.002519549	0.010129362	Kars
ENSMUSG00000052724	14.56257196	1.912826974	0.633587561	3.019041235	0.00253576	0.010184196	NA
ENSMUSG00000037104	385.9401763	1.013499084	0.335734154	3.018754788	0.002538159	0.010192106	Socs5
ENSMUSG00000059659	11.0602827	1.751957202	0.580398292	3.018543	0.002539934	0.010197509	Gm10069
ENSMUSG00000015980	40.78005145	1.277475425	0.423332632	3.017663482	0.002547316	0.010225421	Lrrc27
ENSMUSG00000020100	308.2022392	0.582200424	0.192983637	3.016838287	0.00255426	0.010251564	Slc29a3
ENSMUSG00000038860	151.7834899	0.89719555	0.297422686	3.016567308	0.002556545	0.010257256	Garnl3
ENSMUSG00000001018	690.5012208	0.384492363	0.127509116	3.015410789	0.002566314	0.010287776	Snapin
ENSMUSG00000038793	43.88958309	1.052485989	0.349086286	3.014973752	0.002570015	0.010295662	Lefty1
ENSMUSG00000020219	1938.950203	0.75209951	0.249461841	3.014887994	0.002570742	0.010296837	Timm13



ENSMUSG00000039771	909.7170702	0.707437207	0.234716163	3.014011464	0.002578181	0.010323152	Polr2j
ENSMUSG00000045404	51.36404003	1.530970838	0.508095701	3.01315448	0.002585473	0.010347118	Kcnk13
ENSMUSG00000001642	718.4731826	0.601654656	0.199682638	3.01305443	0.002586325	0.010348786	Akr1b3
ENSMUSG00000042417	18.27627375	1.940556291	0.644118158	3.012733405	0.002589063	0.010357994	Ccno
ENSMUSG00000015289	396.757468	0.786442359	0.261084487	3.01221404	0.002593497	0.010370494	Lage3
ENSMUSG00000017376	547.861366	0.60886227	0.202144455	3.012015695	0.002595192	0.01037378	Nlk
ENSMUSG00000046408	27.15887559	2.780169104	0.923209508	3.011417323	0.002600312	0.010390751	1700067K01Rik
ENSMUSG00000036572	768.4709474	0.441111736	0.146522693	3.010535281	0.002607876	0.010419225	Upf3b
ENSMUSG00000012017	469.5777069	1.006554276	0.334365324	3.010342892	0.002609529	0.010424075	Scarf2
ENSMUSG00000067847	1460.968918	0.752117103	0.249918033	3.009455116	0.002617167	0.010449316	Romo1
ENSMUSG00000002058	429.3261878	0.944654594	0.313961996	3.008818284	0.002622659	0.010467724	Unc119
ENSMUSG00000019900	64.84891247	2.066299538	0.686799152	3.008593605	0.002624599	0.010473708	Rfx6
ENSMUSG00000097187	15.74999704	1.846943474	0.613937856	3.008355741	0.002626655	0.010480149	NA
ENSMUSG00000045690	159.0914541	0.948304608	0.315289952	3.007722266	0.002632136	0.010500254	Wdr89
ENSMUSG00000031143	115.5590137	0.915867525	0.304631933	3.006472486	0.00264298	0.010541744	Ccdc22
ENSMUSG00000038622	549.6522213	0.921991224	0.306729256	3.005879629	0.002648138	0.010558773	Med30
ENSMUSG00000092570	55.46777778	1.739806533	0.579036898	3.00465573	0.002658816	0.010594236	2210019I11Rik
ENSMUSG00000001082	1068.58056	0.853741401	0.284185792	3.004166382	0.002663096	0.010607733	Mfsd10
ENSMUSG00000031388	977.5642905	0.617330256	0.205519396	3.003756671	0.002666685	0.010616687	Naa10
ENSMUSG00000010538	35.16044589	1.154186593	0.384375169	3.002760544	0.002675429	0.010649712	Tsacc
ENSMUSG00000036672	335.1013923	0.872773806	0.290714243	3.002170781	0.002680617	0.010664628	Cenpt
ENSMUSG00000017221	4319.057912	0.526927545	0.175539462	3.001761198	0.002684227	0.010674002	Psm3
ENSMUSG00000030380	39.3007872	1.163113906	0.387501743	3.001570772	0.002685906	0.010677105	Mzf1
ENSMUSG00000033809	385.7766289	1.05067276	0.35006551	3.001360401	0.002687762	0.010679124	Alg3
ENSMUSG00000036989	583.7870254	0.809002606	0.269544773	3.001366333	0.00268771	0.010679124	Trim3
ENSMUSG00000073591	77.14450192	1.057096617	0.352283358	3.000699841	0.002693599	0.010698737	Pcdhb22
ENSMUSG00000066152	581.6470671	1.052132609	0.35084471	2.998855561	0.002709957	0.010758314	Slc31a2
ENSMUSG00000034544	620.5570082	0.716908789	0.239074788	2.998680018	0.002711519	0.010759812	Rsrc1
ENSMUSG00000035765	793.5160869	0.682563715	0.22763722	2.998471497	0.002713375	0.010764687	Dym
ENSMUSG00000029402	238.4815679	0.815870089	0.272230769	2.996979704	0.002726689	0.010812087	Snrnp35
ENSMUSG00000000301	88.428733	0.812003048	0.270949393	2.996880855	0.002727573	0.010812674	Pemt
ENSMUSG000000102389	21.51934248	1.257068007	0.419470375	2.996798062	0.002728314	0.010813117	NA
ENSMUSG00000063320	133.5407981	0.725565451	0.242139042	2.996482698	0.002731137	0.010822502	1190007I07Rik
ENSMUSG00000020312	110.9898665	1.040738115	0.347611371	2.993970285	0.002753728	0.010904743	Shc2
ENSMUSG00000025047	1064.370959	0.57925858	0.193483137	2.993845302	0.002754856	0.010907393	Pdcd11
ENSMUSG00000029034	913.22446	0.731906274	0.244585386	2.992436649	0.002767601	0.010956029	Cpsf3l
ENSMUSG00000031657	642.9319099	0.610097234	0.203902852	2.992097598	0.002770677	0.010962724	Heatr3
ENSMUSG00000018286	4138.77311	0.67823479	0.226700889	2.991760604	0.002773737	0.010971177	Psbmb6
ENSMUSG00000044030	1282.556948	0.893132241	0.298596355	2.991102291	0.002779724	0.010993027	Irf2bp1
ENSMUSG00000086770	6.513329102	2.184810248	0.730741806	2.989852542	0.002791122	0.011032593	NA
ENSMUSG00000026245	1990.488586	0.948987738	0.317429817	2.989598599	0.002793443	0.011039931	Farsb
ENSMUSG000000029718	909.7262743	1.433841754	0.479725996	2.988876495	0.002800053	0.011062374	Pcolce
ENSMUSG00000025044	427.6817979	1.533719711	0.513260355	2.988190491	0.002806346	0.011081707	Msr1
ENSMUSG00000026083	3462.815556	0.466546968	0.156136963	2.988062275	0.002807523	0.011084515	Eif5b
ENSMUSG00000002342	772.6301635	0.532128986	0.178172561	2.986593343	0.002821047	0.011134207	Tmem161a
ENSMUSG00000003868	1165.098438	0.836290561	0.280014436	2.986598018	0.002821004	0.011134207	Ruvbl2
ENSMUSG000000027379	276.8298568	1.439846625	0.482246352	2.985707657	0.00282923	0.01116094	Bub1
ENSMUSG00000038256	1059.187019	0.766311713	0.256665103	2.985648241	0.002829779	0.011161255	Bcl9
ENSMUSG00000102691	10.9275858	1.59972038	0.53619154	2.983486797	0.002849843	0.011227343	NA
ENSMUSG00000031885	1319.799689	0.793953394	0.266133719	2.983287492	0.0028517	0.011229344	Cbfb
ENSMUSG00000035580	14.88621164	1.276467363	0.427873181	2.983284349	0.002851729	0.011229344	Kcnh8
ENSMUSG000000044216	2.958116929	2.952204854	0.989586792	2.983270267	0.00285186	0.011229344	Kcnj4
ENSMUSG00000062328	10507.74662	0.686843954	0.230387776	2.981251727	0.002870727	0.011298375	NA
ENSMUSG00000070424	25.72404667	1.525691984	0.511882862	2.980549062	0.002877321	0.011320578	Art5
ENSMUSG00000027803	751.7465945	0.896768784	0.300913288	2.98015681	0.002881009	0.011331331	Wwtr1
ENSMUSG00000029715	438.6965391	0.731206848	0.245434853	2.979229888	0.002889739	0.011360026	Pop7
ENSMUSG00000042641	3.110482965	2.655262261	0.891540447	2.978285808	0.002898655	0.011390427	Rgs1
ENSMUSG00000103115	11.42290192	1.778914982	0.59730033	2.978258829	0.002898911	0.011390427	NA
ENSMUSG00000044502	1007.741726	0.721545057	0.242302235	2.977872068	0.002902571	0.011402924	Bod1
ENSMUSG00000002797	167.0002145	0.679414414	0.228182489	2.977504615	0.002906053	0.011414714	Ggct
ENSMUSG000000029998	2077.412666	0.616414704	0.207035627	2.977336348	0.002907648	0.011417204	Pcyox1
ENSMUSG000000093178	4.62737271	2.16878786	0.728659848	2.976406433	0.002916481	0.011448102	Snord87
ENSMUSG000000029147	3111.156683	0.783575269	0.263284843	2.976150316	0.002918918	0.011455775	Ppm1g
ENSMUSG00000014329	561.4533646	1.128620048	0.379262878	2.975825244	0.002922013	0.01146603	Bicc1
ENSMUSG00000027447	4732.601209	0.588991631	0.197932712	2.975716468	0.00292305	0.011468203	Cst3
ENSMUSG00000034295	198.2778113	1.171002605	0.39359818	2.975121999	0.00292872	0.011484761	Fhod3
ENSMUSG00000046756	1387.510965	0.635176596	0.213530933	2.974635047	0.002933373	0.011497312	Mrps7

ENSMUSG00000048399	2.524919934	2.862956959	0.962739624	2.97376039	0.002941747	0.01152063	Tprg
ENSMUSG00000067194	2184.769952	0.744593135	0.250399313	2.973622919	0.002943065	0.011523892	Eif1ax
ENSMUSG00000020962	753.5756917	0.690495115	0.232381653	2.971383953	0.002964609	0.011598691	Gtf2a1
ENSMUSG00000073830	3.716270594	3.047751572	1.025727032	2.971308619	0.002965336	0.011599626	Mup14
ENSMUSG00000061048	271.5119214	1.8028403	0.606831706	2.970906569	0.002969221	0.011607177	Cdh3
ENSMUSG00000012126	77.32465992	1.41457911	0.476165043	2.970774798	0.002970495	0.011610247	Ubxn11
ENSMUSG00000029775	1539.052587	0.572294479	0.192651931	2.97061377	0.002972053	0.011614425	Klhdc10
ENSMUSG00000045691	592.8221773	0.775240824	0.26099051	2.970379358	0.002974322	0.011621381	Thtpa
ENSMUSG00000079471	4.61391063	2.690179893	0.905766038	2.970060457	0.002977411	0.011631539	Gm7325
ENSMUSG00000032815	250.485598	0.989958682	0.333372914	2.96952344	0.002982621	0.011647412	Fanca
ENSMUSG00000006315	2130.385961	0.982012597	0.330770452	2.968864335	0.002989025	0.011668306	Tmem147
ENSMUSG00000032705	343.0597896	0.668972843	0.225470592	2.967007083	0.00300714	0.011732243	Exd2
ENSMUSG00000045665	1298.680384	0.690827504	0.232846706	2.966876856	0.003008414	0.011735286	Mfsd5
ENSMUSG00000029452	32.40280927	1.066257451	0.359523804	2.965749249	0.003019466	0.011772596	Tmem116
ENSMUSG00000022887	31.47169165	1.95416629	0.658973151	2.965471788	0.003022191	0.011781287	Masp1
ENSMUSG00000084288	3.777425186	2.524246554	0.851405048	2.964801017	0.003028788	0.01180313	NA
ENSMUSG00000030321	15.27670884	1.419112598	0.478704004	2.964488673	0.003031864	0.011813181	Efcab12
ENSMUSG00000037580	1182.553388	1.01632936	0.342881137	2.964086529	0.003035829	0.011822812	Gch1
ENSMUSG00000022436	705.6368884	1.136277113	0.383407213	2.963629984	0.003040336	0.01183749	NA
ENSMUSG00000097320	97.89023399	0.768493257	0.259310386	2.963603849	0.003040594	0.01183749	NA
ENSMUSG00000011752	6603.221059	0.669261471	0.225833177	2.963521483	0.003041408	0.011838718	Pgam1
ENSMUSG00000045100	163.8443142	0.713119454	0.240758974	2.961964174	0.003056834	0.011892224	Slc25a26
ENSMUSG00000043557	40.18428191	1.176187829	0.397111107	2.961860816	0.00305786	0.011893012	Mdga1
ENSMUSG00000073791	64.18297693	1.007180632	0.340129097	2.961171627	0.003064711	0.011915757	Efcab7
ENSMUSG00000028238	72.19007693	2.128487338	0.719104541	2.959913638	0.003077253	0.011960605	Atp6v0d2
ENSMUSG00000015947	263.7615947	1.593254478	0.538404914	2.959212363	0.003084265	0.011985898	Fcgr1
ENSMUSG00000063511	7135.812967	0.513691389	0.173601709	2.959022645	0.003086164	0.011991318	Snrnp70
ENSMUSG00000026069	1221.840332	1.83497649	0.620314698	2.958138017	0.003095035	0.012023819	Il1rl1
ENSMUSG00000104667	5.11532162	2.307536527	0.780114626	2.957945475	0.003096969	0.012029365	Gm4961
ENSMUSG00000043939	14.76578084	1.614737388	0.546323355	2.955644078	0.003120169	0.012111559	A530064D06Rik
ENSMUSG00000075416	6.894095982	2.072244096	0.701375366	2.954543593	0.003131319	0.012146131	NA
ENSMUSG000000024258	443.1506607	0.728865593	0.246706569	2.954382597	0.003132953	0.012149272	Polr2d
ENSMUSG00000036513	669.5922142	0.602391371	0.203936338	2.953820668	0.003138663	0.012169428	Commdd2
ENSMUSG00000036885	1484.508295	0.735260452	0.248939151	2.953574994	0.003141163	0.012173159	Arhgef26
ENSMUSG00000054237	356.727987	0.646287491	0.218827165	2.953415266	0.003142789	0.012177473	Fra10ac1
ENSMUSG00000040694	43.9860153	1.716437057	0.5813229	2.952639671	0.003150695	0.012206117	Apobec2
ENSMUSG00000054934	45.14915659	1.562355189	0.529304401	2.951713958	0.003160155	0.012240771	Kcnmb4
ENSMUSG00000034175	460.1768335	0.896406014	0.303802323	2.95062265	0.003171341	0.012276092	Rhbdd3
ENSMUSG00000057561	2303.969125	0.875033078	0.296749159	2.948729766	0.003190829	0.012343482	Eif1a
ENSMUSG00000020180	1847.329099	0.743342235	0.25212465	2.948312419	0.00319514	0.012356136	Snrpd3
ENSMUSG00000085025	1.805007253	2.999834865	1.017573152	2.94802871	0.003198074	0.012365468	Gm13715
ENSMUSG00000020843	769.2229112	0.764677469	0.259422345	2.947616057	0.003202345	0.01237997	Timm22
ENSMUSG00000097083	20.26450223	1.673981916	0.568209237	2.946066004	0.003218437	0.012438131	NA
ENSMUSG00000037060	548.9636941	1.000307224	0.339602033	2.945527788	0.003224042	0.012455404	Prkcdbp
ENSMUSG00000067722	680.375864	0.697893967	0.236936796	2.945485801	0.003224479	0.012455404	BC003965
ENSMUSG00000041534	2.684846976	2.91482921	0.989728787	2.94507874	0.003228725	0.012467819	Rbp3
ENSMUSG00000090862	7784.560808	0.714359659	0.242660135	2.94386904	0.003241371	0.01250845	NA
ENSMUSG00000015341	1687.642107	0.450346603	0.153186305	2.939862034	0.003283584	0.012657388	Golga7
ENSMUSG00000048327	333.8303188	1.12414931	0.382389566	2.939801209	0.003284229	0.012657388	Ckap2l
ENSMUSG00000045411	1647.238511	0.913315688	0.310713037	2.939418623	0.003288286	0.012670969	2410002F23Rik
ENSMUSG00000049649	3.880222949	2.498403123	0.850045628	2.93914002	0.003291243	0.012679856	Gpr3
ENSMUSG000000106623	23.78682463	1.507013896	0.512746582	2.939100812	0.00329166	0.012679856	NA
ENSMUSG00000043833	107.2395248	1.147900265	0.390618184	2.938675954	0.003296175	0.012693132	2900005J15Rik
ENSMUSG00000020123	165.9031236	1.736496382	0.590959158	2.938437215	0.003298715	0.012700853	Avpr1a
ENSMUSG00000029915	128.777482	1.915367432	0.651947806	2.937915299	0.003304273	0.012720192	Clec5a
ENSMUSG00000021037	2376.088751	0.845093611	0.287661382	2.937806961	0.003305428	0.012722576	Ahsa1
ENSMUSG00000080316	203.7672081	0.927083498	0.315655616	2.937009361	0.003313941	0.012745019	Spaca6
ENSMUSG00000021190	7567.101447	0.755824011	0.257429711	2.936040317	0.003324311	0.012778695	Lgmn
ENSMUSG00000020392	1565.793244	0.723178074	0.246336133	2.935736893	0.003327564	0.012782926	Cdkn2aipnl
ENSMUSG00000026575	248.8308444	0.704820469	0.240080177	2.935771197	0.003327196	0.012782926	Nme7
ENSMUSG00000014232	274.3631127	0.674091672	0.229731936	2.934253221	0.003343513	0.012831744	Cluap1
ENSMUSG00000038963	215.0758922	0.865174809	0.294950421	2.93328895	0.003353916	0.012867511	Slco4a1
ENSMUSG00000105888	3.101092706	3.193148673	1.089073821	2.93198552	0.003368024	0.012907048	NA
ENSMUSG00000041718	139.9642141	0.746164205	0.254577501	2.930990378	0.003378832	0.012938458	Alg13
ENSMUSG00000044807	103.81191	1.017865049	0.347278046	2.930980122	0.003378944	0.012938458	Zfp354c
ENSMUSG00000049130	383.231845	1.501465888	0.512382873	2.930359243	0.003385703	0.012960163	C5ar1
ENSMUSG00000022747	854.1843493	1.106864982	0.37780532	2.929723124	0.003392641	0.012979616	St3gal6

ENSMUSG00000024661	59282.61751	0.873738304	0.298261057	2.92944145	0.003395718	0.012979616	Fth1
ENSMUSG00000027514	754.7514326	1.632500474	0.557282881	2.929392829	0.003396249	0.012979616	Zbp1
ENSMUSG00000037089	1511.948896	0.697689162	0.238159712	2.929501202	0.003395065	0.012979616	Slc35b2
ENSMUSG00000037206	752.0214371	1.404303802	0.479338056	2.929673085	0.003393188	0.012979616	Islr
ENSMUSG00000042389	187.5601213	0.714023103	0.243734233	2.92951505	0.003394914	0.012979616	Tsen2
ENSMUSG00000078452	3.863564874	2.577627257	0.879910639	2.929419355	0.003395959	0.012979616	NA
ENSMUSG00000097402	3.389858249	3.021893959	1.031571264	2.929408821	0.003396074	0.012979616	Gm17399
ENSMUSG00000031552	5.473059829	2.501881777	0.854395106	2.928249191	0.003408767	0.013023267	Adam18
ENSMUSG00000060671	530.5395508	1.043961002	0.356739489	2.926395964	0.003429142	0.013090582	Atp8b2
ENSMUSG00000028591	19.23149544	1.767016513	0.604116921	2.924957823	0.003445029	0.013144894	Pramef12
ENSMUSG00000052928	392.4158062	0.539061403	0.184376164	2.923704413	0.00345893	0.013189462	Ctif
ENSMUSG00000033287	375.5848258	1.030309904	0.352424844	2.923488288	0.003461332	0.013196504	Kctd17
ENSMUSG00000025580	2451.337782	0.680659343	0.23290393	2.922489729	0.003472451	0.013234645	Eif4a3
ENSMUSG00000108414	923.1445878	0.870919446	0.298017601	2.922375867	0.003473721	0.013237361	Snhg1
ENSMUSG00000040146	155.453917	1.687116016	0.57746034	2.921613656	0.003482232	0.013263412	Rgl3
ENSMUSG00000039509	688.1568502	0.927971788	0.317630689	2.921543226	0.003483019	0.013264285	Nup133
ENSMUSG00000010376	2374.055494	0.686556798	0.235069468	2.920654915	0.003492965	0.013297897	Nedd8
ENSMUSG00000024800	221.6858733	0.812214991	0.278119057	2.920385964	0.003495981	0.013306262	Rpp30
ENSMUSG00000031289	22.39290459	1.693076708	0.579842504	2.919890653	0.003501542	0.013323487	Il13ra2
ENSMUSG00000110647	9.041406732	1.707255918	0.584795872	2.91940487	0.003507004	0.013338519	NA
ENSMUSG00000024294	1926.703535	0.691623175	0.236922137	2.919200311	0.003509306	0.013343696	Mib1
ENSMUSG00000032484	635.6248008	1.90453721	0.652421061	2.919184135	0.003509489	0.013343696	Ngp
ENSMUSG00000029674	249.2110829	0.998864513	0.342207431	2.918886097	0.003512846	0.013354322	Limk1
ENSMUSG00000023066	137.382536	0.615283736	0.210798127	2.918829231	0.003513486	0.013354337	Rttm
ENSMUSG00000035437	1138.330063	0.419166089	0.143627263	2.918429839	0.00351799	0.013363459	Rabgap1
ENSMUSG00000038695	513.5926411	1.333460808	0.456911343	2.918423515	0.003518062	0.013363459	Josd2
ENSMUSG00000032199	2190.356953	0.463604275	0.158883709	2.917884275	0.003524151	0.013378435	Polr2m
ENSMUSG00000055368	24.03625771	2.071561862	0.709967802	2.917825086	0.00352482	0.013378435	Slc6a2
ENSMUSG00000034729	642.3154376	0.74067353	0.253868499	2.917547995	0.003527954	0.013388189	Mrps10
ENSMUSG00000041859	1426.747068	1.300441854	0.445840996	2.916828792	0.003536098	0.013412867	Mcm3
ENSMUSG00000048029	4.257355104	2.295144275	0.78686411	2.916824196	0.00353615	0.013412867	Eno4
ENSMUSG000000098234	451.192105	0.922222392	0.316192337	2.916650039	0.003538125	0.013418215	Snhg6
ENSMUSG00000026172	249.6559316	0.856305405	0.293666977	2.91590636	0.003546569	0.013443801	Bcs1l
ENSMUSG00000031683	766.9415879	0.822202762	0.281969094	2.9159322	0.003546276	0.013443801	Lsm6
ENSMUSG00000021079	388.9619686	0.711473564	0.244037915	2.915422234	0.003552076	0.013458233	Timm9
ENSMUSG00000031697	520.0262232	0.874073489	0.299835311	2.915178625	0.00355485	0.013465497	Orc6
ENSMUSG00000074113	9.262280885	1.993544498	0.683855565	2.915154312	0.003555127	0.013465497	NA
ENSMUSG00000102112	19.780583	1.437738435	0.493455674	2.913612128	0.003572735	0.013523218	1810041H14Rik
ENSMUSG00000004231	10.91249609	2.357141622	0.809301361	2.912563523	0.003584753	0.013562572	Pax2
ENSMUSG00000028811	1314.933339	0.75328381	0.25866849	2.912159143	0.003589397	0.013577981	Yars
ENSMUSG00000031816	500.9890644	0.822792602	0.286264386	2.91125834	0.003599762	0.013615023	Mthfsd
ENSMUSG00000049960	830.429287	0.767360304	0.263619438	2.910863898	0.00360431	0.013630052	Mrps16
ENSMUSG00000056211	1159.917654	0.410511	0.141087832	2.909613075	0.003618765	0.013678182	R3hdm1
ENSMUSG00000002833	1123.782008	0.727936404	0.250222785	2.909153157	0.003624093	0.013696142	Hdgfrp2
ENSMUSG00000029447	5705.693138	0.695811398	0.239218199	2.908689226	0.003629475	0.013709938	NA
ENSMUSG00000019158	637.7641441	0.693217127	0.238437779	2.907329242	0.003645293	0.013758751	Tmem160
ENSMUSG00000107709	5.363032328	2.344879852	0.806603004	2.907105282	0.003647904	0.013766419	NA
ENSMUSG00000033222	276.3336304	0.816164246	0.280762428	2.906956792	0.003649636	0.013770768	Ttf2
ENSMUSG00000024276	564.8918979	0.509188876	0.175247101	2.905548063	0.003666105	0.013828517	Zfp397
ENSMUSG00000039543	3.901143434	2.486582589	0.855910985	2.90518831	0.003670322	0.013836236	Cfap70
ENSMUSG00000098055	16.84629843	1.398702253	0.481441492	2.905238279	0.003669736	0.013836236	NA
ENSMUSG00000100860	7.179442748	2.205041788	0.759153955	2.904604229	0.003677177	0.013859278	2010009K17Rik
ENSMUSG00000023809	407.2129824	0.834265607	0.287282557	2.903989773	0.003684402	0.013879901	Rps6ka2
ENSMUSG00000031871	785.5638588	1.14315164	0.393816657	2.902750863	0.003699008	0.013929288	Cdh5
ENSMUSG00000022962	1461.322233	0.764834547	0.263517572	2.902404353	0.003703102	0.013939296	Gart
ENSMUSG00000032397	497.9501941	1.055815594	0.363797024	2.902210636	0.003705393	0.013945709	Tipin
ENSMUSG00000031756	94.37367342	0.998788893	0.34422277	2.901577062	0.003712894	0.013969515	Cenpn
ENSMUSG00000029516	210.9436914	0.936573171	0.322827996	2.901152261	0.003717932	0.013981825	Cit
ENSMUSG00000026456	499.5423912	1.029692989	0.354958517	2.900882604	0.003721133	0.013991647	Cyb5r1
ENSMUSG00000037820	6426.011242	0.908281415	0.313207966	2.899930764	0.003732451	0.014025325	Tgm2
ENSMUSG00000109511	1315.565635	0.821781177	0.28344813	2.899229486	0.00374081	0.01405229	Nup62
ENSMUSG00000035125	161.30003	0.638974327	0.220413324	2.898982305	0.00374376	0.014058926	Gcfc2
ENSMUSG00000107004	2.439988971	2.835998389	0.978367337	2.898705099	0.003747071	0.014066914	NA
ENSMUSG00000001674	612.0869241	0.721444695	0.248920597	2.898292486	0.003752005	0.014080985	Ddx18
ENSMUSG00000027384	250.5246763	0.701719552	0.242227276	2.896946881	0.003768136	0.014134822	Ndufaf5
ENSMUSG00000085710	3.63227518	2.733329379	0.943763762	2.896200817	0.003777106	0.014166235	NA
ENSMUSG00000085918	6.894479434	2.653280093	0.916164024	2.896075402	0.003778616	0.014169661	Gm13032

ENSMUSG00000000028	343.2845707	1.329944694	0.459363843	2.89518802	0.003789315	0.014205297	Cdc45
ENSMUSG000000003208	238.5530485	0.66120918	0.228399112	2.894972634	0.003791916	0.014212804	Ccdc94
ENSMUSG000000020328	806.0181789	0.938832021	0.324326668	2.894711149	0.003795076	0.014220161	Nudcd2
ENSMUSG000000035235	161.655207	0.828919535	0.286381889	2.894455159	0.003798172	0.014229516	Trim13
ENSMUSG000000034116	800.7448685	1.202387716	0.415500697	2.893828396	0.003805761	0.014255701	Vav1
ENSMUSG000000028933	88.41003238	0.827988106	0.286162866	2.893415616	0.003810767	0.014272202	Xrcc2
ENSMUSG000000021965	195.5578218	1.267892894	0.438211131	2.893337947	0.003811709	0.014273481	Ska3
ENSMUSG00000000751	1572.691209	0.82515005	0.285284206	2.892379014	0.003823364	0.014310843	Rpa1
ENSMUSG000000029102	1584.38285	1.245084428	0.43047229	2.892368351	0.003823494	0.014310843	Hgfac
ENSMUSG000000020712	7.900264803	1.763991719	0.609889418	2.892314027	0.003824155	0.014311063	Tcam1
ENSMUSG000000034285	978.5029392	0.775854675	0.268262173	2.89215086	0.003826142	0.014316243	Nipsnap1
ENSMUSG000000024667	137.8935268	0.626521105	0.216654145	2.891802996	0.00383038	0.01432843	Tmem216
ENSMUSG000000032126	929.2669973	0.689536128	0.238446576	2.89178456	0.003830605	0.01432843	Hmbs
ENSMUSG000000023993	12.31102576	1.837872824	0.635794622	2.890670603	0.003844208	0.014374785	Trem1
ENSMUSG000000049420	44.98746207	0.896009053	0.310001194	2.890340649	0.003848246	0.014385354	Tmem200a
ENSMUSG000000022537	141.651687	0.732319369	0.253515898	2.888652639	0.003868962	0.014455971	Tmem44
ENSMUSG000000084950	37.94094423	1.316712291	0.455873047	2.88833108	0.00387292	0.014468483	Gm5577
ENSMUSG000000064090	185.7301953	0.763760604	0.264467027	2.887923731	0.003877939	0.014484955	Vrk2
ENSMUSG000000029392	195.1681703	0.845885921	0.292985042	2.887130058	0.003887735	0.014516981	Rilpl1
ENSMUSG000000046567	72.04465605	0.859254747	0.297718198	2.886134444	0.003900055	0.014560696	4930430F08Rik
ENSMUSG000000047798	643.1067499	1.78285391	0.617807008	2.885778063	0.003904474	0.014572613	Cd300lf
ENSMUSG000000007107	5.40736088	2.537855123	0.879759458	2.884714794	0.003917684	0.014607547	Atp1a4
ENSMUSG000000025855	374.4576885	0.985147844	0.341510471	2.884678299	0.003918138	0.014607547	Prkar1b
ENSMUSG000000045237	401.8312997	0.547349167	0.189742237	2.884698601	0.003917886	0.014607547	1110012L19Rik
ENSMUSG000000027496	546.1657891	1.296640673	0.449688097	2.883422272	0.003933797	0.014656726	Aurka
ENSMUSG000000025610	9.178693624	1.863211188	0.646192106	2.883370397	0.003934445	0.014656841	Map3k7cl
ENSMUSG000000038253	261.0922986	1.079138398	0.374453032	2.881905888	0.003952778	0.014713599	Hoxa5
ENSMUSG000000020032	195.7421892	1.18394414	0.410943376	2.8810396	0.003963658	0.014745489	Nuak1
ENSMUSG000000039959	668.0469431	0.951815327	0.330373724	2.88102612	0.003963828	0.014745489	Hip1
ENSMUSG000000031959	328.1895787	0.553782763	0.192242576	2.880645764	0.003968614	0.014760982	Wdr59
ENSMUSG000000034227	11.31535584	1.843337444	0.640177943	2.879414173	0.003984147	0.0148118	Foxj1
ENSMUSG0000000031821	224.1989616	1.197838593	0.416116715	2.87861206	0.003994293	0.014842552	Gins2
ENSMUSG000000057469	341.3743568	0.703963409	0.244577705	2.878281199	0.003998485	0.014851298	E2f6
ENSMUSG000000020752	424.6009717	0.956290121	0.332255665	2.878175517	0.003999825	0.014853611	Recql5
ENSMUSG000000029213	901.6187382	0.414957281	0.144175977	2.878130536	0.004000396	0.014853611	Commdd8
ENSMUSG000000027313	114.7564335	1.639409538	0.569651857	2.877914846	0.004003132	0.014861447	Chac1
ENSMUSG000000028937	1253.009186	0.788099551	0.27388679	2.877464631	0.004008848	0.014880344	Acot7
ENSMUSG000000020493	193.5430976	1.068130141	0.371327478	2.876517913	0.004020894	0.014915733	Prr11
ENSMUSG000000020899	500.1642367	0.749951297	0.260734115	2.876306753	0.004023585	0.014923385	Pfas
ENSMUSG000000022174	4365.780939	0.753963146	0.262176171	2.875788233	0.0040302	0.014940922	Dad1
ENSMUSG000000028495	7842.123511	0.641513861	0.223069889	2.875842478	0.004029507	0.014940922	NA
ENSMUSG0000000110010	32.77087049	1.057063321	0.367568635	2.875825679	0.004029722	0.014940922	NA
ENSMUSG000000052609	1564.682704	0.942211108	0.327671779	2.875472249	0.004034236	0.014953552	Plekhg3
ENSMUSG000000041623	201.1604934	1.14916909	0.399709103	2.87501356	0.004040101	0.014970967	D11Wsu47e
ENSMUSG000000026150	1894.68221	0.469537306	0.163352736	2.874376751	0.004048257	0.014996164	Mff
ENSMUSG000000029061	267.3734677	1.291923808	0.449639694	2.87324234	0.004062823	0.015043085	Mmp23
ENSMUSG000000058600	7744.007883	0.732306997	0.254900772	2.872910083	0.004067099	0.015054221	NA
ENSMUSG000000079523	4532.694237	1.178942353	0.410484238	2.872077035	0.004077835	0.015089262	Tmsb10
ENSMUSG000000018500	54.99371888	1.412230155	0.491850864	2.871256838	0.004088432	0.01512376	Adora2b
ENSMUSG000000020305	279.3659791	0.677761735	0.236092911	2.870741568	0.004095102	0.01514136	Asb3
ENSMUSG000000038576	106.7653187	1.553733588	0.541263498	2.870567834	0.004097353	0.015143873	Susd4
ENSMUSG000000027261	8.798063253	2.529989008	0.881405012	2.87040461	0.004099469	0.015148076	Hao1
ENSMUSG000000045519	173.121041	0.613596851	0.213895134	2.868680737	0.004121876	0.015216673	Zfp560
ENSMUSG000000011257	1546.08101	0.641689459	0.2237499	2.867887132	0.004132229	0.015252523	Pabpc4
ENSMUSG000000036905	2871.238763	1.281434034	0.446858605	2.867649901	0.004135329	0.015259221	C1qb
ENSMUSG000000019992	74.48926732	1.004474781	0.350527869	2.86560605	0.004162118	0.015341394	Mtfr2
ENSMUSG000000026004	269.7948318	0.636310145	0.222147755	2.864355499	0.004178588	0.015399709	Kansl1l
ENSMUSG000000044150	226.3868173	0.510609611	0.178273098	2.864198903	0.004180654	0.015404935	A830080D01Rik
ENSMUSG000000041035	476.6885084	0.766985051	0.267797643	2.864047053	0.004182659	0.015409932	Dpcd
ENSMUSG000000021359	25.25500577	1.241963134	0.433733401	2.863425161	0.004190878	0.015435426	Tfap2a
ENSMUSG000000082361	449.8839923	1.313620688	0.45890726	2.86249707	0.004203171	0.015473507	Btc
ENSMUSG000000020007	8.814664116	2.275714162	0.795072406	2.862272848	0.004206146	0.01548206	Il20ra
ENSMUSG000000076432	4894.73355	0.719322182	0.251331104	2.86204998	0.004209105	0.015490551	NA
ENSMUSG000000068115	151.3562105	0.910362578	0.318092103	2.861946495	0.00421048	0.015493209	Ninl
ENSMUSG000000019194	187.6366896	0.933477434	0.326282397	2.860949417	0.004223744	0.015537205	Scn1b
ENSMUSG000000030867	646.1654843	1.278436646	0.446889203	2.860746325	0.004226451	0.015544261	Plk1
ENSMUSG000000047033	9.597337841	1.441182708	0.503904784	2.860029816	0.004236012	0.015572686	Pcdhb15



ENSMUSG00000024811	4408.830343	0.603399294	0.210985786	2.859904945	0.00423768	0.015576408	Tnks2
ENSMUSG00000037204	958.7107183	0.72914069	0.255049591	2.858819283	0.00425221	0.015622563	Atg101
ENSMUSG00000069300	7.303403909	1.903507603	0.665862526	2.85870961	0.00425368	0.015625548	Hist1h2bj
ENSMUSG00000104876	96.84143843	1.323289624	0.462971451	2.858253184	0.004259804	0.015640787	NA
ENSMUSG00000078773	93.32865309	1.050321008	0.367553702	2.857598774	0.004268598	0.015670654	Rad54b
ENSMUSG00000040856	59.81405728	1.468547316	0.513976556	2.857226268	0.004273611	0.015681591	Dlk1
ENSMUSG00000083282	458.2758509	0.968370187	0.338949783	2.856972433	0.00427703	0.015689487	Ctsf
ENSMUSG00000041506	574.6977205	0.703824473	0.246381748	2.856642094	0.004281483	0.015703399	Rrp9
ENSMUSG00000022748	149.6010413	0.84660177	0.296439444	2.855901225	0.004291486	0.015734778	Cmss1
ENSMUSG00000041096	524.7991113	0.847732754	0.296849794	2.855763326	0.00429335	0.015734778	Tspyl2
ENSMUSG00000044876	551.7388672	1.162321963	0.407124444	2.854954988	0.004304293	0.015767846	Zfp444
ENSMUSG00000058388	324.6435358	0.698673951	0.244738228	2.854780625	0.004306657	0.01577381	Phtf1
ENSMUSG00000039943	388.0265061	0.496639256	0.173976348	2.854636624	0.00430861	0.015778531	Plcb4
ENSMUSG00000063236	481.1107514	0.733685952	0.257096722	2.853735149	0.004320854	0.015820931	1110038F14Rik
ENSMUSG00000036114	538.9793018	0.871945274	0.305750947	2.851815449	0.004347033	0.015909431	Rpp25l
ENSMUSG00000036940	1970.246902	0.566462752	0.198736686	2.850317985	0.004367554	0.01597715	Kdm1a
ENSMUSG00000106073	4.580745885	2.299735287	0.806830449	2.850332792	0.004367351	0.01597715	NA
ENSMUSG00000032086	507.3420542	0.923559458	0.32425778	2.848226056	0.004396368	0.016065241	Bace1
ENSMUSG00000044627	3142.048998	0.672256981	0.236116527	2.847140725	0.004411386	0.016115159	Swi5
ENSMUSG00000037243	399.8147272	0.706434058	0.248257007	2.845575507	0.004433125	0.016187106	Zfp692
ENSMUSG00000062727	2.798552551	2.887729512	1.0150578	2.844891703	0.004442652	0.016214419	Hist1h2bk
ENSMUSG00000020014	14.29065834	1.402828741	0.493292177	2.843809017	0.004457776	0.016255548	Cfap54
ENSMUSG00000094690	6.65979443	1.99664009	0.702096531	2.843825603	0.004457544	0.016255548	1600014C23Rik
ENSMUSG00000090000	1103.769775	0.730363978	0.256844042	2.843608799	0.004460578	0.016262352	Ier3ip1
ENSMUSG00000022774	693.9220349	1.183419884	0.416275154	2.842878979	0.004470804	0.016290325	Ncbp2
ENSMUSG00000032009	803.1209824	0.637627851	0.22428956	2.842877977	0.004470818	0.016290325	Sesn3
ENSMUSG00000032122	115.8356221	1.270451983	0.446891344	2.842865496	0.004470993	0.016290325	Slc37a2
ENSMUSG00000104818	7.037602003	1.691087231	0.594880175	2.842735903	0.004472812	0.016294451	NA
ENSMUSG00000022466	383.5272015	0.655883202	0.23077547	2.8420837	0.004481972	0.016320315	Rpap3
ENSMUSG00000027997	1152.154144	1.294624354	0.455552614	2.841876687	0.004484884	0.016328413	Casp6
ENSMUSG00000078348	1123.414367	0.610511232	0.214839639	2.841706654	0.004487276	0.01633221	Sf3b5
ENSMUSG000000005824	38.24019431	1.750583701	0.616111013	2.841344603	0.004492374	0.016346408	Tnfsf14
ENSMUSG00000006763	361.0479398	0.680371281	0.239459323	2.84128124	0.004493267	0.016346408	Saal1
ENSMUSG00000028729	1455.438323	0.593323597	0.208819099	2.84132821	0.004492605	0.016346408	Ebna1bp2
ENSMUSG00000041459	4860.989232	0.590321012	0.207802193	2.840783359	0.004500287	0.016366936	Tardbp
ENSMUSG00000096140	22.09874563	1.868172274	0.657867525	2.839739312	0.004515041	0.016408035	Ankrd66
ENSMUSG00000041058	977.6249669	0.633725263	0.223172043	2.839626572	0.004516637	0.016411324	Wwp1
ENSMUSG00000022945	402.1732271	1.284661567	0.452489533	2.839096762	0.004524144	0.016433571	Chaf1b
ENSMUSG00000027330	843.9409302	0.879867319	0.309924669	2.838971552	0.004525919	0.016437507	Cdc25b
ENSMUSG00000020205	2504.460129	1.764573246	0.622101379	2.836472166	0.004561495	0.016561396	Phlda1
ENSMUSG00000108435	39.01806506	1.099751291	0.38783105	2.835645294	0.004573321	0.016591907	NA
ENSMUSG000000025196	475.0410224	1.897842491	0.669299775	2.835564216	0.004574482	0.016593585	Cpn1
ENSMUSG00000034165	1872.400436	0.693791386	0.244701961	2.835250614	0.004578975	0.016607348	Ccnd3
ENSMUSG00000030032	52.01976271	1.135176976	0.400387395	2.835196584	0.004579749	0.016607622	Wdr54
ENSMUSG00000022538	929.316512	0.677374474	0.238962035	2.8346531	0.004587547	0.016625746	Lsg1
ENSMUSG00000031728	354.9170044	0.606533621	0.214010732	2.83412713	0.004595105	0.016648057	Zfp821
ENSMUSG00000027472	728.7569592	0.792559746	0.279702857	2.83357759	0.004603013	0.016670037	Pdrg1
ENSMUSG00000034906	557.5387692	1.230985413	0.434438264	2.833510568	0.004603979	0.016670037	Ncaph
ENSMUSG00000053110	2682.253541	0.564488271	0.199216641	2.833539752	0.004603558	0.016670037	Yap1
ENSMUSG00000074182	342.5850597	0.968843597	0.341962679	2.833185183	0.004608668	0.016684473	Znhit6
ENSMUSG00000028757	7661.720571	0.9353334	0.330175464	2.832837393	0.004613685	0.016697547	Ddost
ENSMUSG00000028798	4519.61567	0.55968822	0.197585598	2.832636717	0.004616582	0.016705487	Eif3i
ENSMUSG00000002985	21910.93289	1.120143104	0.395489206	2.832297539	0.004621482	0.016720672	Apoe
ENSMUSG00000037251	334.3491307	0.721206394	0.254971245	2.82857933	0.004675511	0.016892995	Pomk
ENSMUSG00000064105	158.323262	0.788547976	0.278952277	2.826820359	0.004701269	0.016978315	Cnnm2
ENSMUSG00000053617	1095.781548	0.886477161	0.313603933	2.826741207	0.004702431	0.01697993	Sh3pxd2a
ENSMUSG00000001911	1279.092546	0.654545756	0.231616527	2.825988995	0.004713488	0.017009514	Nfix
ENSMUSG000000071415	13352.59005	0.550171212	0.194770049	2.824721843	0.004732168	0.017074328	NA
ENSMUSG00000021967	798.7625058	0.681472392	0.241299913	2.824171734	0.004740298	0.017099036	Mrpl57
ENSMUSG00000028540	239.1708482	0.679663414	0.240660285	2.824161098	0.004740455	0.017099036	Dph2
ENSMUSG00000028902	1254.424322	0.705197964	0.249766193	2.823432406	0.004751244	0.017132751	Sf3a3
ENSMUSG00000035266	261.3785025	0.596707596	0.211360123	2.82317964	0.004754992	0.017139451	Helq
ENSMUSG00000058558	10294.80929	0.564034416	0.199788249	2.823161108	0.004755267	0.017139451	Rpl5
ENSMUSG00000031387	434.0171691	1.364961255	0.483563908	2.82271119	0.004761945	0.01715311	Renbp
ENSMUSG00000017499	214.1251555	1.457500119	0.516655764	2.821027501	0.00478701	0.017227864	Cdc6
ENSMUSG00000047117	8.239163877	2.125643132	0.753500311	2.821024892	0.004787049	0.017227864	Ankdd1b
ENSMUSG00000031230	2.422968231	2.802552285	0.993854702	2.819881296	0.004804142	0.01728676	Fgf16



ENSMUSG00000068220	1931.138402	1.426471016	0.505994598	2.819142776	0.004815209	0.017321338	Lgals1
ENSMUSG00000102224	53.53995105	1.365986402	0.484560613	2.819020706	0.004817041	0.017322681	4930447F24Rik
ENSMUSG00000063605	197.6119403	1.059417806	0.375873156	2.818551391	0.004824089	0.017342774	Ccdc102a
ENSMUSG00000110605	1961.914728	1.573265919	0.558284229	2.818037546	0.004831816	0.017365298	NA
ENSMUSG00000032598	304.6643474	0.700204973	0.248556538	2.817085318	0.004846165	0.0174116	Nckipsd
ENSMUSG00000052419	779.6062307	0.490145	0.174023777	2.816540414	0.004854394	0.017435889	NA
ENSMUSG00000054675	1163.195236	1.322268304	0.469535084	2.816122475	0.004860713	0.017455949	Tmem119
ENSMUSG00000040390	353.1070856	0.917942602	0.325975583	2.815985764	0.004862782	0.017460739	Map3k10
ENSMUSG00000009614	571.8495839	0.693722617	0.246359486	2.815895698	0.004864146	0.017462996	Sardh
ENSMUSG00000033031	458.2970991	1.333850328	0.473717432	2.815708773	0.004866976	0.017470518	C330027C09Rik
ENSMUSG00000034259	698.0503469	0.813349821	0.288940906	2.814934833	0.004878713	0.017504712	Exosc4
ENSMUSG00000087575	21.30991603	1.019006324	0.36201754	2.81479821	0.004880787	0.017506867	NA
ENSMUSG00000071562	16.12609094	2.488477124	0.884125125	2.814620977	0.004883479	0.017513879	Stfa1
ENSMUSG00000025929	4.897081984	2.712736173	0.963896009	2.81434527	0.00488767	0.017526263	Il17a
ENSMUSG00000095788	31.00645047	1.598297118	0.568231202	2.812758454	0.004911853	0.017605007	Sirpb1a
ENSMUSG00000041482	198.2224688	1.253318853	0.44560484	2.812623971	0.004913908	0.017609714	Piezo2
ENSMUSG00000028690	165.283938	0.714398316	0.254031143	2.812246986	0.004919671	0.01762505	Mmachc
ENSMUSG00000041147	198.4573712	0.90182709	0.320969402	2.809698011	0.0049588	0.0177572	Brca2
ENSMUSG00000020811	99.33087541	1.467375026	0.522337395	2.809247511	0.004965745	0.01777671	Wscd1
ENSMUSG00000033029	64.92105442	1.163319261	0.41413962	2.80900258	0.004969525	0.017787559	1700088E04Rik
ENSMUSG00000006218	55.77829508	1.333174452	0.474631057	2.808864763	0.004971653	0.017792495	Fam131c
ENSMUSG000000026473	8168.051692	1.172395201	0.417445563	2.808498412	0.004977313	0.017810068	Glul
ENSMUSG00000042606	412.7011173	0.959155406	0.341588653	2.807925258	0.00498618	0.017833738	Hirip3
ENSMUSG00000024570	835.4879285	0.64004937	0.227961218	2.807711668	0.004989488	0.017842883	Rbfa
ENSMUSG00000105652	2.663863175	2.854420104	1.01679314	2.807277107	0.004996224	0.017861596	NA
ENSMUSG00000020120	1001.949406	1.68993676	0.602159411	2.806460762	0.005008901	0.017901528	Plek
ENSMUSG00000093514	20.69980289	1.696676473	0.604839779	2.805166808	0.005029055	0.017970852	NA
ENSMUSG00000032470	309.4799916	0.948432567	0.338191911	2.804421201	0.005040701	0.018009759	Mras
ENSMUSG00000085967	3.137483968	2.551343497	0.909817066	2.804237899	0.005043568	0.018015539	Gm12530
ENSMUSG00000074164	7.644190631	2.08578854	0.743993146	2.803505048	0.005055044	0.018042011	Vmn2r-ps54
ENSMUSG00000110755	73.78849406	1.825352891	0.651114599	2.803427989	0.005056252	0.018043612	NA
ENSMUSG000000052271	202.6683904	1.48458038	0.529619481	2.803107576	0.005061278	0.018058836	Bhlha15
ENSMUSG00000028801	21.58387103	1.482891778	0.529052829	2.802918153	0.005064252	0.018066732	Stpg1
ENSMUSG00000001918	3291.040739	0.702418732	0.250668308	2.80218404	0.005075791	0.01810246	Slc1a5
ENSMUSG00000041483	470.0108078	0.827337074	0.295287196	2.801804769	0.005081762	0.018118314	Zfp281
ENSMUSG00000052533	750.9539233	0.747220456	0.266735335	2.801355348	0.005088845	0.018129964	Nup188
ENSMUSG000000066191	140.394099	0.794770305	0.283798884	2.800470159	0.005102823	0.018174311	Anks6
ENSMUSG00000006732	447.4264754	0.950997457	0.339734168	2.799239954	0.005122306	0.018238234	Mettl1
ENSMUSG00000092416	214.436796	0.579776441	0.207135815	2.799015908	0.005125861	0.018248158	Zfp141
ENSMUSG00000035278	791.9861692	0.618243727	0.220980036	2.797735653	0.005146221	0.018312407	Plekhj1
ENSMUSG00000055639	217.9769122	0.90723106	0.324441579	2.796284809	0.005169382	0.018375557	Dach1
ENSMUSG000000047797	25.05756772	1.057891239	0.378316841	2.796310193	0.005168976	0.018375557	NA
ENSMUSG00000023015	1428.217727	1.297993086	0.464288033	2.795663451	0.00517933	0.018405913	Racgap1
ENSMUSG00000040084	546.5267552	0.992766052	0.355134966	2.795461296	0.005182571	0.018405913	Bub1b
ENSMUSG00000043998	1480.897667	0.648107707	0.231829845	2.795618087	0.005180057	0.018405913	Mgat2
ENSMUSG00000024768	2.123626765	2.978633433	1.065607528	2.795244359	0.00518605	0.018412764	Lipf
ENSMUSG00000020974	131.4454691	1.231076998	0.440523061	2.794580143	0.005196716	0.018442363	Pole2
ENSMUSG00000097535	2.273687083	2.756169472	0.986475625	2.79395598	0.005206757	0.018469367	Gm26592
ENSMUSG00000031262	121.9008774	0.94764202	0.339411697	2.79201344	0.005238118	0.018561565	Cenpi
ENSMUSG00000056004	100.5361875	1.06006984	0.379759718	2.791422546	0.005247692	0.018587172	9330182L06Rik
ENSMUSG00000000916	300.864128	0.569013837	0.203860371	2.791193964	0.005251399	0.018594759	Nsun5
ENSMUSG000000042029	491.8706339	1.123811672	0.402842993	2.789701423	0.005275667	0.01867234	Ncapg2
ENSMUSG00000022556	653.2820665	0.76671594	0.274858655	2.789491709	0.005279085	0.018681653	Hsf1
ENSMUSG00000059363	162.174405	0.783666568	0.280942597	2.789418826	0.005280273	0.018683075	Fxn
ENSMUSG00000051675	498.7978613	0.499235851	0.178981576	2.789314192	0.00528198	0.01868633	Trim32
ENSMUSG00000101166	3.991280216	2.226171573	0.798155411	2.789145499	0.005284732	0.018693283	NA
ENSMUSG00000036504	107.819895	1.251698052	0.449041407	2.787489152	0.005311823	0.018780722	Phpt1
ENSMUSG00000097163	155.6823914	1.139425948	0.40877335	2.787427188	0.005312839	0.018781519	NA
ENSMUSG00000097173	41.95187721	1.143236035	0.410202231	2.787005893	0.005319751	0.018797562	NA
ENSMUSG00000049184	39.0634718	1.140195975	0.409314146	2.785625626	0.005342453	0.018869361	Purg
ENSMUSG000000019494	2355.058621	0.596213256	0.214140387	2.784216764	0.005365716	0.018937447	Cops6
ENSMUSG000000020536	1545.179847	0.707184202	0.254122239	2.782850512	0.005388363	0.019006079	Lgl1
ENSMUSG00000101308	12.57893194	1.53193546	0.550505967	2.782777212	0.00538958	0.019007551	NA
ENSMUSG00000034543	1100.499846	0.548961911	0.197283827	2.782599661	0.00539253	0.019015132	Morc2a
ENSMUSG00000050552	1453.184914	0.608567404	0.218824139	2.781079847	0.005417841	0.019090215	Lamtor4
ENSMUSG00000073414	25.51360051	1.154263778	0.415161653	2.780275513	0.00543128	0.019134729	G6b
ENSMUSG000000017146	344.9887838	0.786849074	0.283049289	2.779901251	0.005437543	0.019152988	Brca1

ENSMUSG00000037664	456.2845437	1.471291327	0.529287927	2.779756069	0.005439974	0.019152988	Cdkn1c
ENSMUSG00000040767	311.3266231	0.844247653	0.303829008	2.778693382	0.005457802	0.019208227	Snrnp25
ENSMUSG00000070934	1148.450445	0.586972269	0.211309889	2.77777946	0.005473175	0.019256628	Rraga
ENSMUSG00000024225	764.9548057	1.470903856	0.529964192	2.775477811	0.005512066	0.019384847	Clps
ENSMUSG00000059908	2.351366329	2.993827443	1.078784964	2.775184622	0.005517038	0.01939946	Mug1
ENSMUSG00000030827	3.254661065	2.628267121	0.947105925	2.775050869	0.005519307	0.019401697	NA
ENSMUSG00000092500	425.3199731	1.59746877	0.575674146	2.774953127	0.005520966	0.019404657	NA
ENSMUSG00000027890	294.9424667	0.672088666	0.2422729	2.774097581	0.005535507	0.019446458	Gstm4
ENSMUSG00000032939	1102.006553	0.89650669	0.323174858	2.774060753	0.005536134	0.019446458	Nup93
ENSMUSG00000060938	7864.754091	0.705772329	0.254472518	2.773471706	0.005546166	0.01947306	Rpl26
ENSMUSG00000017314	187.7810367	1.261771123	0.455225603	2.771749028	0.005575601	0.019567731	Mpp2
ENSMUSG00000038217	753.0683674	0.816632327	0.2947007	2.771056624	0.005587471	0.019597809	Tlcd2
ENSMUSG00000071561	15.67290281	2.469464142	0.891423062	2.770249332	0.00560134	0.019634857	BC100530
ENSMUSG00000089847	270.9929748	0.682970499	0.246612778	2.769404347	0.005615889	0.019677148	Timm10b
ENSMUSG00000086624	3.61850949	2.906923561	1.050376375	2.76750661	0.00564869	0.019777491	NA
ENSMUSG00000026251	4.090645374	2.496920834	0.902278662	2.767349977	0.005651405	0.019778252	Chrnd
ENSMUSG00000036098	1529.667545	0.602230683	0.21761402	2.767425941	0.005650088	0.019778252	Myrf
ENSMUSG00000039199	375.470417	0.671631298	0.24269488	2.767389647	0.005650717	0.019778252	Zdhhc1
ENSMUSG00000004788	1005.862777	0.575786278	0.208070605	2.767263926	0.005652897	0.019779409	Eif2b2
ENSMUSG00000044145	51.76768284	0.840272502	0.30365059	2.767234875	0.005653401	0.019779409	1810024B03Rik
ENSMUSG00000072235	815.5119762	0.842663298	0.304578311	2.766655631	0.005663455	0.019805833	Tuba1a
ENSMUSG00000038593	355.6468794	0.784310118	0.283529655	2.766236631	0.005670737	0.019828382	Tctn1
ENSMUSG00000031754	1200.589554	0.688120633	0.248869578	2.764984936	0.005692542	0.019895842	Nudt21
ENSMUSG00000032216	9064.863806	0.585771786	0.211899371	2.764386615	0.005702992	0.019929433	Nedd4
ENSMUSG00000033350	165.7498391	1.208176652	0.437067171	2.764281399	0.005704832	0.019932929	Chst2
ENSMUSG00000024672	324.5923941	1.370250905	0.49572386	2.764141521	0.005707278	0.019937454	Ms4a7
ENSMUSG00000032313	126.9629278	1.378448537	0.498726917	2.763934509	0.0057109	0.019945331	Tmem266
ENSMUSG00000035049	533.5443416	0.654400536	0.236812417	2.763370871	0.005720772	0.019973937	Rrp12
ENSMUSG00000070883	29.81730134	1.065111194	0.385574215	2.762402546	0.005737769	0.020015629	Ccdc173
ENSMUSG00000077457	11.01422026	1.471335037	0.532642158	2.762333049	0.00573899	0.020016951	NA
ENSMUSG00000045211	381.4293355	0.791521913	0.286662305	2.76116496	0.005759558	0.020076897	Nudt18
ENSMUSG000000020641	310.3189375	1.254180371	0.45425391	2.760967697	0.005763038	0.02008608	Rsad2
ENSMUSG00000024966	2268.172138	0.800275919	0.289894824	2.760573325	0.00577	0.020107398	Stip1
ENSMUSG00000040599	608.4183874	0.925024007	0.335457775	2.757497591	0.005824564	0.020288614	Mis12
ENSMUSG00000021136	541.8591512	1.021451021	0.370512811	2.756857495	0.005835978	0.020319433	Smoc1
ENSMUSG00000019843	468.4359246	0.725252636	0.263143409	2.756111727	0.005849301	0.020359854	Fyn
ENSMUSG00000022756	505.8040581	0.848357935	0.307819111	2.756027503	0.005850808	0.020362114	Slc7a4
ENSMUSG00000079597	114.1521355	2.222757774	0.80664769	2.755549668	0.005859361	0.020388893	Gm5483
ENSMUSG00000010607	355.6436253	0.815505037	0.29596362	2.755423242	0.005861626	0.020390801	Pigyl
ENSMUSG00000034667	1776.581616	0.860697667	0.312640688	2.752993135	0.005905313	0.020527747	Xpot
ENSMUSG00000026657	410.0522678	0.552789607	0.20084531	2.752315232	0.005917553	0.020564275	Frm4a
ENSMUSG00000034266	89.58529994	1.392170898	0.505857135	2.752102919	0.005921391	0.020574603	Batf
ENSMUSG00000024097	1868.840542	0.744285571	0.270522299	2.751291019	0.005936088	0.020616624	Srsf7
ENSMUSG00000021319	8.801555918	1.923864204	0.699285311	2.75118635	0.005937985	0.020620199	Sfrp4
ENSMUSG00000051498	66.22991252	1.327038318	0.482415935	2.750817753	0.005944671	0.020640397	Tlr6
ENSMUSG00000026434	3030.615382	0.813954217	0.295902635	2.750750152	0.005945897	0.02064164	Nucks1
ENSMUSG00000020812	351.350023	0.855127439	0.310919451	2.750318245	0.005953741	0.020659812	1810032O08Rik
ENSMUSG00000020485	759.8189605	0.529127433	0.19244382	2.749516366	0.005968328	0.020704382	NA
ENSMUSG00000026511	2690.853913	0.601709256	0.21896801	2.747932249	0.00599724	0.020795436	Srp9
ENSMUSG00000074264	68.68983639	1.016028478	0.369784974	2.747619698	0.006002959	0.020809324	Amy1
ENSMUSG00000044062	12.02049149	1.664322111	0.606021059	2.746310684	0.006026966	0.020877311	NA
ENSMUSG000000068794	30.58899224	1.248774548	0.45477093	2.745941891	0.006033745	0.0208947	Col28a1
ENSMUSG00000020806	1245.743841	0.744631743	0.27119146	2.745778736	0.006036746	0.020902047	Rhbdf2
ENSMUSG00000059291	8043.49278	0.587012818	0.213809496	2.745494601	0.006041976	0.020914059	Rpl11
ENSMUSG00000061397	51.31083835	1.697776748	0.618594764	2.744570189	0.00605902	0.02096389	Krt79
ENSMUSG00000019841	716.3957823	0.548777652	0.199955863	2.744493924	0.006060428	0.020965708	Rev3l
ENSMUSG00000001288	550.8658593	1.029022272	0.374975688	2.74423731	0.006065168	0.020979051	Rarg
ENSMUSG000000110697	184.7959174	1.160593935	0.423039681	2.743463526	0.00607948	0.021019376	NA
ENSMUSG000000100255	177.9946706	1.652503193	0.602375521	2.74331067	0.006082311	0.021026103	NA
ENSMUSG00000021109	4981.809143	1.379407832	0.503075789	2.741948357	0.006107594	0.021101223	Hif1a
ENSMUSG000000020914	3319.417429	1.201962724	0.438415788	2.741604564	0.00611399	0.021117177	Top2a
ENSMUSG000000059070	14275.153	0.610877645	0.222839461	2.741335134	0.006119006	0.021128359	Rpl18
ENSMUSG00000086867	4.257090005	2.252335743	0.82170004	2.74106807	0.006123982	0.021142467	NA
ENSMUSG00000000811	237.2373012	1.020793133	0.372809758	2.738107339	0.00617939	0.021315173	Txnrd3
ENSMUSG00000027248	20099.46268	0.743399954	0.271533543	2.737783132	0.006185485	0.021333099	Pdia3
ENSMUSG00000036934	199.2755934	0.666868001	0.243587499	2.737693869	0.006187164	0.021335792	4921524J17Rik
ENSMUSG00000034460	47.89097099	1.168333599	0.426821479	2.737288672	0.006194791	0.021358991	Six4

ENSMUSG00000026177	418.3111885	1.597425947	0.583715232	2.736652841	0.006206775	0.021397208	Slc11a1
ENSMUSG00000006143	12.01087945	1.588431015	0.580479263	2.736413025	0.006211301	0.021409703	Upk3bl
ENSMUSG00000006930	548.0063691	1.042254707	0.381008703	2.735514173	0.00622829	0.021462035	Hap1
ENSMUSG00000028700	816.5481095	0.614517552	0.224735278	2.734406269	0.006249288	0.021522966	NA
ENSMUSG00000038074	188.5153176	0.984457801	0.360028257	2.734390374	0.00624959	0.021522966	Fkbp14
ENSMUSG00000030056	492.7976988	0.433641974	0.158621491	2.733816025	0.006260501	0.021554271	Isy1
ENSMUSG00000029131	2068.536844	0.479281881	0.175371213	2.732956419	0.006276864	0.021607473	Dnajb6
ENSMUSG00000002732	189.9338663	1.157268224	0.423517157	2.732517928	0.006285225	0.021629988	Fkbp7
ENSMUSG000000031444	475.3839707	1.863618129	0.682099737	2.732178344	0.006291707	0.021646025	F10
ENSMUSG00000046707	1246.663474	0.460891656	0.168697266	2.732063585	0.006293899	0.02165043	Csnk2a2
ENSMUSG00000029657	1017.317947	1.282203883	0.469388875	2.731645234	0.006301896	0.021671662	Hsph1
ENSMUSG00000020057	472.9731279	1.573929208	0.5762172	2.731485986	0.006304942	0.021675862	Dram1
ENSMUSG00000100747	22.0145508	1.134284918	0.415468636	2.730133686	0.006330865	0.021758684	NA
ENSMUSG00000030603	3044.288901	0.475082623	0.174043989	2.729669818	0.006339779	0.021781903	Psmc4
ENSMUSG00000055839	3905.043308	0.61944137	0.226931608	2.729639007	0.006340371	0.021781903	Tceb2
ENSMUSG00000090210	46.59571812	1.102031016	0.403935175	2.728237311	0.006367378	0.021858878	Itga10
ENSMUSG000000031660	1636.276281	0.570389544	0.209200119	2.726525913	0.006400493	0.021956694	Brd7
ENSMUSG00000078584	434.6058545	0.58770558	0.215591191	2.726018522	0.00641034	0.0219873	AU022252
ENSMUSG00000059689	467.2504724	0.5371607	0.197053692	2.725961107	0.006411455	0.02198795	Zfp637
ENSMUSG00000053175	1372.736604	0.739197583	0.27119611	2.725693902	0.006416647	0.02200258	Bcl3
ENSMUSG00000021245	215.0542477	0.675070803	0.247713031	2.725213127	0.006425999	0.022028288	Mlh3
ENSMUSG000000027201	142.8633699	1.075845169	0.394830493	2.724827964	0.0064335	0.022044458	Ccdc191
ENSMUSG00000030579	975.6232504	1.508691736	0.553874732	2.723886194	0.006451873	0.022097853	Tyrbop
ENSMUSG00000035227	3107.887127	0.66793791	0.245304038	2.722898144	0.006471201	0.022157659	Spcs2
ENSMUSG00000014294	2830.538744	0.759309302	0.278921256	2.722307054	0.006482788	0.022194135	Ndufa2
ENSMUSG00000029094	337.6424184	0.767561921	0.282013774	2.721717846	0.006494357	0.022230538	Afap1
ENSMUSG00000001305	416.7208454	0.892689357	0.32806492	2.721075316	0.006506993	0.022270586	Rrp15
ENSMUSG00000027811	70.36048764	0.94191378	0.34617578	2.720911847	0.006510212	0.022278392	4930579G24Rik
ENSMUSG00000007476	582.1514128	0.402832306	0.148083268	2.720309402	0.006522086	0.022315811	Lrrc8a
ENSMUSG00000047879	1458.928674	0.873391569	0.321136574	2.719688882	0.006534336	0.022354507	Usp14
ENSMUSG00000029440	970.6444941	0.504128296	0.185376777	2.719479232	0.00653848	0.022365462	Psmd9
ENSMUSG000000037461	904.3952437	0.716560175	0.263551662	2.718860389	0.006550725	0.022394449	Ints7
ENSMUSG000000092819	7.617844597	2.043150704	0.751540637	2.718616405	0.006555558	0.022404524	NA
ENSMUSG00000031555	1911.56594	0.676762592	0.248990722	2.718023332	0.006567321	0.022438267	Adam9
ENSMUSG00000028430	1333.221361	0.586690335	0.21587582	2.717721394	0.006573316	0.022455522	Nol6
ENSMUSG00000079020	694.6695341	1.027276963	0.378068083	2.717174523	0.006584188	0.022482962	Slc45a4
ENSMUSG000000051579	610.3839387	1.199098443	0.441432178	2.716382045	0.006599971	0.022530379	Tceal8
ENSMUSG00000058831	13.14085033	1.604225856	0.590730066	2.715666511	0.006614251	0.022575882	Opn1sw
ENSMUSG00000037225	225.3150411	1.183087435	0.435889532	2.714190978	0.006643785	0.02266692	Fgf2
ENSMUSG00000030751	3093.234077	0.52342925	0.19287434	2.713835603	0.006650916	0.022684733	Psma1
ENSMUSG00000022674	939.3959232	0.763386456	0.281420297	2.712620459	0.006675351	0.022755008	Ube2v2
ENSMUSG000000026917	1375.190569	0.56972817	0.210091447	2.711810394	0.006691686	0.022807416	Wdr5
ENSMUSG000000041362	1147.846562	0.653560861	0.241125261	2.710462014	0.006718954	0.022887221	Shtn1
ENSMUSG00000020330	217.8090637	1.087948591	0.401409153	2.710323324	0.006721765	0.022891041	Hmmr
ENSMUSG00000028221	604.7244673	0.50312831	0.18565408	2.710030997	0.006727692	0.022900566	Tmem55a
ENSMUSG000000004891	267.6273337	1.226559769	0.452685388	2.709519243	0.00673808	0.022932639	Nes
ENSMUSG00000036249	247.8429136	0.644528555	0.237889756	2.709358167	0.006741352	0.022937204	Rbm43
ENSMUSG00000047675	10955.62033	0.583530302	0.215373628	2.70938604	0.006740786	0.022937204	Rps8
ENSMUSG00000053687	284.7540961	1.520478336	0.561417926	2.708282484	0.006763243	0.023001804	Dpep2
ENSMUSG00000030929	226.6929213	0.788930013	0.291308302	2.708230447	0.006764304	0.023002118	Eri2
ENSMUSG00000058794	59.82788178	1.540235146	0.568738786	2.708159148	0.006765757	0.023003767	Nfe2
ENSMUSG000000028433	1378.886207	0.671526141	0.247975045	2.708039195	0.006768203	0.02300879	Ubp2
ENSMUSG00000097113	12.19148146	1.525357665	0.563362869	2.707593542	0.006777297	0.023033114	Gm19705
ENSMUSG00000039725	242.9385889	0.942600966	0.348163464	2.707351761	0.006782235	0.023040009	Trp53rka
ENSMUSG00000025050	377.6455038	0.494925256	0.182876988	2.706328777	0.006803165	0.023107807	Pcgf6
ENSMUSG000000037364	2892.821132	0.585382823	0.216371466	2.705452951	0.006821131	0.023153395	Srrt
ENSMUSG000000087187	19.39077502	1.541472188	0.569768298	2.705436917	0.00682146	0.023153395	NA
ENSMUSG00000100512	2.825209457	2.76815388	1.02332236	2.70506537	0.006829095	0.023175997	Ovol3
ENSMUSG00000074252	16.61699525	1.572153247	0.581416307	2.70400611	0.006850903	0.023240047	Gm10654
ENSMUSG00000032113	142.3361122	1.049080722	0.388011737	2.70373451	0.006856505	0.023255729	Chek1
ENSMUSG000000073434	289.9048369	0.713530634	0.263919665	2.703590252	0.006859482	0.023262505	Wdr90
ENSMUSG000000012350	4799.638283	1.111866813	0.411264263	2.703533745	0.006860648	0.02326314	Ehf
ENSMUSG000000024184	1.936758253	2.877815662	1.064507336	2.703424923	0.006862895	0.023267437	Pdia2
ENSMUSG00000033998	2466.72809	0.955480695	0.353619307	2.70200375	0.006892299	0.023353793	Kcnk1
ENSMUSG00000047260	1331.070658	0.607000398	0.224738954	2.700913154	0.006914939	0.023427167	Emc6
ENSMUSG00000019846	961.5560015	1.050924798	0.389285282	2.699626334	0.006941739	0.023507906	Lama4
ENSMUSG00000099398	26.84474573	1.257056014	0.465782992	2.69880188	0.006958959	0.023562861	Ms4a14

ENSMUSG00000040554	11.55712884	1.334947822	0.49479135	2.698001534	0.006975712	0.023606967	Aipl1
ENSMUSG00000044468	818.7489982	1.205881802	0.446971384	2.697894865	0.006977947	0.023606967	Fam46c
ENSMUSG00000059854	5.614509068	2.334664332	0.86534301	2.697964051	0.006976497	0.023606967	Hydin
ENSMUSG00000086537	3.493319087	2.362135277	0.875511878	2.698004833	0.006975643	0.023606967	Nespas
ENSMUSG00000039713	624.8911267	0.746166661	0.276610504	2.697535523	0.006985483	0.023625731	PlekHg5
ENSMUSG00000005667	587.8158489	1.294073505	0.47975356	2.697371342	0.006988929	0.02363402	Mthfd2
ENSMUSG00000096719	4.85931247	2.372590138	0.879707558	2.697021433	0.006996277	0.023655501	Mrgpra2b
ENSMUSG00000042541	3301.479828	0.621233277	0.23034739	2.696940819	0.006997971	0.023657861	Shfm1
ENSMUSG00000023156	506.4824523	0.566175326	0.209955897	2.696639318	0.007004309	0.02367592	Rpp14
ENSMUSG00000002384	172.4993871	1.450645547	0.538049315	2.69612005	0.007015238	0.023702744	Bmp8b
ENSMUSG00000056724	1406.704529	0.571123642	0.211836124	2.696063504	0.007016429	0.023703397	Nbeal2
ENSMUSG00000042766	64.86434617	1.110746748	0.412018121	2.695868677	0.007020534	0.023713892	Trim46
ENSMUSG00000026037	592.0158046	0.687141007	0.254941924	2.695284466	0.007032856	0.023735265	Orc2
ENSMUSG00000107283	452.1980095	0.503605173	0.186844234	2.695320924	0.007032087	0.023735265	Mpv17
ENSMUSG00000041343	38.94994635	0.915930348	0.33995781	2.694247111	0.007054784	0.023802506	Ankrd42
ENSMUSG00000022494	19.77722944	2.474207151	0.918723759	2.693091506	0.007079284	0.023874995	Shisa9
ENSMUSG00000040624	330.2064971	0.69501223	0.258158682	2.692190029	0.007098449	0.023929438	PlekHg1
ENSMUSG00000016757	1058.426616	0.883088982	0.328059843	2.691853333	0.007105619	0.023946812	Ttll12
ENSMUSG00000024750	2467.103207	0.741804793	0.275607119	2.691529863	0.007112513	0.023963248	Zfand5
ENSMUSG00000091896	4209.13607	0.594933885	0.221068852	2.6911701	0.007120188	0.023985704	Ube2d2a
ENSMUSG00000042729	47.78712117	1.047879449	0.389440736	2.690728918	0.00712961	0.024007232	Wdr74
ENSMUSG00000025077	375.6113027	0.603787809	0.224402617	2.690645132	0.007131401	0.024009858	Dclre1a
ENSMUSG00000070111	23.93690528	1.42841576	0.531036523	2.689863498	0.007148125	0.024062755	NA
ENSMUSG00000110676	3.273151806	2.295796876	0.853562306	2.689665252	0.007152372	0.024070231	NA
ENSMUSG00000075184	6.638425341	2.0744833	0.771384963	2.689297044	0.007160267	0.024093387	F830002L21Rik
ENSMUSG00000061607	741.2892195	0.493748467	0.183626499	2.688873715	0.007169354	0.024117129	Mdc1
ENSMUSG00000075296	33.17466861	1.331515291	0.495192192	2.688885874	0.007169092	0.024117129	Aldh3b2
ENSMUSG00000046480	35.00631921	2.151029922	0.800244385	2.687966277	0.007188866	0.024169076	Scn4b
ENSMUSG00000110682	21.18280266	1.622778609	0.603751635	2.687824785	0.007191912	0.024172477	NA
ENSMUSG00000029782	691.8219294	0.588843184	0.219113431	2.687389728	0.007201288	0.024197055	Tmem209
ENSMUSG00000005204	1620.903889	0.486654468	0.18117755	2.686063856	0.007229927	0.024276204	Senp3
ENSMUSG000000020802	730.5459767	0.545452803	0.203161449	2.684824336	0.007256794	0.024338894	Ube2o
ENSMUSG00000050786	85.80931011	0.752925443	0.280618932	2.683088553	0.007294567	0.024458679	Ccdc126
ENSMUSG00000031819	787.737259	0.494850138	0.184535014	2.681605657	0.007326977	0.024553487	Emc8
ENSMUSG00000091509	220.6071644	1.092540358	0.40743291	2.68152211	0.007328807	0.024556155	NA
ENSMUSG00000096687	123.8107635	0.821005644	0.306193739	2.681327346	0.007333074	0.024563524	NA
ENSMUSG00000031776	2720.871835	0.553033187	0.206279722	2.680986682	0.007340544	0.024585078	Arl2bp
ENSMUSG00000036186	212.5273628	0.992150813	0.370137391	2.680493348	0.007351373	0.024617875	Fam69b
ENSMUSG00000003131	2134.369563	0.513697894	0.191655373	2.680320855	0.007355162	0.024627094	Pafah1b2
ENSMUSG00000038311	11.58763173	1.999540939	0.746264318	2.679400438	0.007375413	0.024684463	2410017117Rik
ENSMUSG00000023919	217.3806576	0.945534112	0.352947011	2.67896903	0.007384922	0.024712807	Cenpq
ENSMUSG000000032507	31.93150108	1.011612053	0.377629435	2.67884852	0.007387581	0.02471822	Fbxl2
ENSMUSG00000026000	656.9822867	0.696014531	0.2598614	2.678406766	0.007397332	0.024747363	Lanc1
ENSMUSG00000003778	1295.602935	0.462995357	0.172992154	2.676395117	0.007441885	0.024875395	Brd8
ENSMUSG00000031827	2947.657546	0.777132148	0.290448167	2.675631098	0.00745887	0.024925152	Cotl1
ENSMUSG00000041354	1392.81785	0.691709549	0.25851836	2.675668952	0.007458027	0.024925152	Rgl2
ENSMUSG00000090214	8.241548988	1.752629618	0.655175533	2.675053526	0.007471732	0.024961112	NA
ENSMUSG00000056529	249.0443233	1.517182752	0.56722516	2.674745161	0.007478607	0.024973545	Ptafr
ENSMUSG00000022367	45.56865116	1.578334751	0.590128971	2.674559002	0.007482761	0.024980391	Has2
ENSMUSG00000063480	1474.128389	0.908891051	0.340042565	2.672874356	0.007520441	0.025092079	NA
ENSMUSG00000075270	102.1093808	0.920734998	0.344564533	2.672169966	0.007536247	0.025137753	Pde11a
ENSMUSG00000020867	2.207949797	2.677529266	1.002073292	2.671989451	0.007540302	0.025140689	Spta20
ENSMUSG00000064043	200.8979388	0.821986479	0.307714175	2.67126621	0.007556569	0.025191392	NA
ENSMUSG00000020722	2.628417441	2.725123606	1.020554807	2.670237392	0.007579764	0.025247011	Cacng1
ENSMUSG00000022673	1193.568032	1.233130747	0.46180996	2.670212542	0.007580325	0.025247011	Mcm4
ENSMUSG00000103486	3.904497914	2.115749549	0.792371282	2.670149205	0.007581755	0.025247011	NA
ENSMUSG00000028859	369.1617396	1.792180131	0.671426947	2.669210909	0.007602969	0.025299921	Csf3r
ENSMUSG00000026662	1084.628428	0.362590045	0.135874458	2.668566629	0.007617567	0.025341397	Sephs1
ENSMUSG00000054764	2.282672291	2.663555056	0.998274901	2.668157892	0.007626841	0.025349823	Mtnr1a
ENSMUSG00000055943	1641.426773	0.457391343	0.171429518	2.668101433	0.007628122	0.025349823	Emc7
ENSMUSG00000056498	181.4196415	1.105448763	0.414301957	2.668219986	0.007625431	0.025349823	Tmem154
ENSMUSG000000047996	60.96328802	1.099276379	0.41213395	2.66727936	0.007646808	0.025403101	Prrg1
ENSMUSG00000019923	1869.006524	0.556419311	0.20863361	2.666968718	0.00765388	0.025423037	Zwint
ENSMUSG00000031875	448.7841509	1.163184495	0.436181377	2.666744976	0.007658976	0.025432855	Cmtm3
ENSMUSG00000021364	23.65008835	1.544140779	0.579115702	2.666376983	0.007667366	0.025457156	Elovl2
ENSMUSG00000031239	466.8678363	1.945355314	0.729628893	2.666225712	0.007670817	0.025462468	Itm2a
ENSMUSG00000021061	202.1754791	1.104210056	0.414256191	2.665524569	0.007686831	0.025500401	Sptb



ENSMUSG00000034620	623.6527279	0.700626443	0.262846617	2.66553342	0.007686629	0.025500401	Tmem5
ENSMUSG00000051518	551.2293128	0.790861442	0.296727178	2.665281448	0.007692391	0.02551172	Rps19bp1
ENSMUSG00000020114	2454.709295	0.466780228	0.175158991	2.664894474	0.007701248	0.025530635	Cand1
ENSMUSG00000025577	297.373085	1.265787154	0.474983124	2.664909743	0.007700899	0.025530635	Cbx2
ENSMUSG00000027404	3932.187615	0.579067208	0.217294862	2.664891398	0.007701319	0.025530635	Snrpb
ENSMUSG00000102758	71.32247229	0.928563652	0.348506226	2.66441051	0.007712338	0.025556467	Naaladl2
ENSMUSG00000054920	543.2023576	0.721208472	0.270711445	2.664122576	0.007718943	0.025567654	Klh5
ENSMUSG00000070385	1.666121438	2.800130478	1.051415208	2.663201424	0.007740107	0.025630607	Ampd1
ENSMUSG00000019782	694.3429329	0.467005402	0.175369221	2.662983844	0.007745113	0.025643611	Rwdd1
ENSMUSG00000046269	46.66315806	0.85360077	0.320580261	2.662674133	0.007752245	0.025663646	Usp27x
ENSMUSG00000058070	1102.190649	1.027352845	0.38597051	2.661739224	0.007773808	0.02572786	Eml1
ENSMUSG00000018169	143.3509764	1.216505485	0.457377074	2.659743028	0.007820029	0.025855617	Mfng
ENSMUSG00000024844	2842.056565	0.788449563	0.296437522	2.659749537	0.007819878	0.025855617	Banf1
ENSMUSG00000023026	1104.313634	0.799452711	0.300648216	2.659096811	0.007835045	0.025898055	Dip2b
ENSMUSG00000039640	3117.193494	0.583391761	0.219399584	2.659037676	0.00783642	0.025898997	Mrpl12
ENSMUSG00000039298	386.1843583	0.664145873	0.249774321	2.658983797	0.007837673	0.025899536	Cdk5rap2
ENSMUSG00000110156	31.42888643	1.017593103	0.382717068	2.658865224	0.007840432	0.025905049	Gm42067
ENSMUSG00000016554	4197.219524	0.726737036	0.273362704	2.65850837	0.00784874	0.025928893	Eif3d
ENSMUSG00000022096	591.6904635	1.138611721	0.428404783	2.657794139	0.007865392	0.025976679	Hr
ENSMUSG00000061544	112.1728452	0.719168094	0.270700289	2.656694956	0.007891081	0.026043418	Zfp229
ENSMUSG00000022032	180.9443929	1.53436908	0.577573331	2.656578822	0.0078938	0.026048771	Scara5
ENSMUSG00000063870	5754.049483	0.458775599	0.127208748	2.656354148	0.007899061	0.026058894	Chd4
ENSMUSG00000032514	6.274323712	1.782478402	0.671118998	2.655979651	0.007907839	0.026084228	Ttc21a
ENSMUSG00000089824	582.3056737	0.811168532	0.305737599	2.653152685	0.007974379	0.026274528	Rbm12
ENSMUSG00000047986	10.04699212	1.495762409	0.563799617	2.65300359	0.007977902	0.026278847	Palm3
ENSMUSG00000028452	6678.144917	0.551269734	0.207822495	2.652598954	0.007987471	0.026306719	Vcp
ENSMUSG00000043873	3.465278219	2.331452444	0.878960068	2.652512361	0.00798952	0.02630982	Chil5
ENSMUSG00000087113	22.42192093	1.604787626	0.605235809	2.651508061	0.00801332	0.026377225	NA
ENSMUSG00000044022	10.05182819	1.606415697	0.606237986	2.649810361	0.008053696	0.026495445	Pcdhb21
ENSMUSG00000031146	1031.460332	0.699912884	0.264243574	2.648741357	0.008079214	0.026568355	NA
ENSMUSG00000024660	940.5162848	0.913742118	0.345141839	2.647439445	0.008110388	0.026663491	Incenp
ENSMUSG000000085069	14.64945619	1.928420141	0.728500317	2.647109544	0.008118305	0.026685825	Gm13111
ENSMUSG00000024053	627.4335078	1.565023127	0.591341876	2.64656232	0.008131452	0.026725342	Emilin2
ENSMUSG00000041841	7023.445528	0.639184877	0.24154768	2.646205823	0.008140027	0.026749825	NA
ENSMUSG00000001986	108.5164815	1.067769114	0.403550324	2.645937945	0.008146476	0.026767314	Gria3
ENSMUSG00000032221	88.33571331	1.182848399	0.44711204	2.645530185	0.008156301	0.026792186	Mns1
ENSMUSG00000037300	1145.828081	0.496730849	0.187777246	2.645319704	0.008161377	0.026805152	Ttc13
ENSMUSG00000020917	4559.486703	0.942922848	0.356720629	2.643309001	0.008210007	0.026957419	Acly
ENSMUSG00000086416	3.732460588	2.165653856	0.819429077	2.642881387	0.008220383	0.0269803	NA
ENSMUSG00000019975	484.0816352	0.77828024	0.294506813	2.642656149	0.008225853	0.026993713	Ikbip
ENSMUSG00000028621	142.5949727	0.759032613	0.287227352	2.642619538	0.008226742	0.026993713	Cyb5rl
ENSMUSG000000097180	57.12005973	1.017543923	0.385730551	2.642016953	0.008241393	0.027026854	2700038G22Rik
ENSMUSG00000026355	2048.507526	0.941939306	0.356577638	2.641610709	0.008251284	0.027055554	Mcm6
ENSMUSG00000027204	1535.432955	1.300032832	0.492163797	2.641463759	0.008254864	0.027059824	Fbn1
ENSMUSG00000035365	91.64234279	0.979257724	0.370723915	2.641474379	0.008254605	0.027059824	Parpbbp
ENSMUSG00000060073	3179.380849	0.657964525	0.249159089	2.640740607	0.008272503	0.027106425	Psmas3
ENSMUSG00000020878	7.886057588	1.853209732	0.701924735	2.64018297	0.008286128	0.027143581	Lrrc46
ENSMUSG00000057093	27.41533386	0.907831064	0.343913898	2.639704499	0.008297834	0.02717243	Zfp607b
ENSMUSG00000085735	8.742032962	1.605279821	0.608222478	2.639297097	0.008307814	0.027198107	NA
ENSMUSG00000087476	44.95842645	1.418252165	0.53737974	2.639199173	0.008310214	0.027199979	NA
ENSMUSG00000064068	1006.087559	0.577316144	0.218851973	2.637929811	0.008341384	0.027294481	Mtx1
ENSMUSG00000027202	1.642017868	2.779572568	1.053730551	2.637839972	0.008343595	0.027295582	Slc12a1
ENSMUSG00000069266	3.34913752	2.269020233	0.860356579	2.637302124	0.008356837	0.027333748	NA
ENSMUSG00000091155	1.533622181	2.743665656	1.040437572	2.637030544	0.00836353	0.027351875	Serpine3
ENSMUSG00000028582	1277.333278	0.443751392	0.168319912	2.636357084	0.008380149	0.027402454	Cc2d1b
ENSMUSG00000096035	2.934727128	2.74653273	1.04211789	2.635529776	0.008400606	0.027461784	Gm1045
ENSMUSG00000014633	218.1261547	0.934542121	0.354652605	2.63509166	0.008411457	0.027492149	Cmc2
ENSMUSG00000097165	12.47669437	1.419550283	0.538757319	2.634860323	0.008417191	0.027500866	NA
ENSMUSG00000048967	26.39381009	1.24174679	0.471321617	2.634606067	0.008423498	0.027517687	Ndufa13
ENSMUSG00000000244	292.296731	1.925300645	0.731077971	2.633509313	0.008450752	0.027599128	Tspan32
ENSMUSG00000063334	880.6609709	0.661874331	0.25141289	2.632618914	0.008472936	0.027663972	Krr1
ENSMUSG00000073542	211.3556679	0.841380501	0.319740559	2.631447518	0.0085022	0.027748078	Cep76
ENSMUSG00000021068	461.5229976	0.844118277	0.321066394	2.629108165	0.008560913	0.027920516	Nin
ENSMUSG00000045107	334.7029747	0.663667973	0.252440807	2.629004326	0.008563527	0.02792521	Saysd1
ENSMUSG00000042505	125.7893176	0.740383541	0.281660426	2.628638861	0.008572735	0.027943728	Sdhaf3
ENSMUSG00000064437	2.710132491	2.415113413	0.918765616	2.628650191	0.008572449	0.027943728	Snord49b
ENSMUSG00000079614	1840.749808	0.664572633	0.252839092	2.628440988	0.008577724	0.027954724	Seh1l



ENSMUSG00000026181	416.1964194	0.720226273	0.274067746	2.627913293	0.008591041	0.027976363	Ppm1f
ENSMUSG00000027778	195.2793779	0.868728615	0.330582965	2.627868665	0.008592168	0.027976363	lft80
ENSMUSG00000104410	2.363856353	2.684213947	1.021629542	2.627384818	0.008604397	0.028004665	NA
ENSMUSG00000097855	42.60309659	1.340280282	0.510158018	2.62718655	0.008609412	0.028013312	A930007119Rik
ENSMUSG00000105838	8.090900301	2.829178235	1.077045444	2.626795602	0.008619309	0.028033996	4930425O10Rik
ENSMUSG00000034126	356.6164339	0.739624831	0.281587777	2.626622638	0.008623691	0.028044409	Pomt2
ENSMUSG00000025041	1307.800558	0.898695328	0.342176156	2.626411318	0.008629047	0.028054147	Nt5c2
ENSMUSG00000034459	334.1699896	1.229577987	0.468215044	2.626096711	0.008637027	0.028069426	lft1
ENSMUSG00000074457	4799.283329	0.969981218	0.369363803	2.626086291	0.008637292	0.028069426	S100a16
ENSMUSG00000034641	129.4871319	1.346200852	0.512667436	2.625875482	0.008642643	0.028082974	Cd300ld
ENSMUSG00000060860	2603.959834	0.759087111	0.289149147	2.62524416	0.008658685	0.028127407	Ube2s
ENSMUSG00000016181	258.5456734	0.560392298	0.213473145	2.625118486	0.008661882	0.028133944	Diexf
ENSMUSG00000063884	957.3421093	0.560933538	0.21371962	2.624623501	0.008674483	0.028171102	Ptcd3
ENSMUSG00000039130	432.0351934	0.581369656	0.221576096	2.623792303	0.008695679	0.028232139	Zc3hc1
ENSMUSG00000004043	304.3283256	0.840503822	0.320359716	2.623625196	0.008699946	0.028242133	Stat5a
ENSMUSG00000030895	19.33480176	1.032598439	0.393610325	2.623402827	0.008705627	0.028256713	Hpx
ENSMUSG00000018446	2847.291164	0.835263681	0.318464935	2.622780689	0.008721539	0.028304493	C1qbp
ENSMUSG00000041165	7.407017814	1.729846193	0.659664894	2.622310524	0.008733582	0.028339703	Spem1
ENSMUSG00000102809	23.79968172	0.899661702	0.343159929	2.621698011	0.008749292	0.028382928	NA
ENSMUSG00000051669	65.62069428	0.732503699	0.279410286	2.621606063	0.008751653	0.028386709	AU021092
ENSMUSG00000102037	25.98753635	1.298296096	0.495382141	2.620797134	0.008772445	0.028450265	Bcl2a1a
ENSMUSG000000109844	2.737256417	2.910966395	1.110743153	2.620737644	0.008773975	0.028451346	NA
ENSMUSG00000005681	17.62212391	1.319732848	0.503613915	2.620524985	0.00877945	0.028465212	Apoa2
ENSMUSG00000047832	808.6879447	0.816574712	0.311643499	2.620220584	0.008787291	0.028486747	Cdca4
ENSMUSG00000009894	619.461508	0.825355346	0.315015708	2.620045047	0.008791815	0.028497525	Snap47
ENSMUSG00000055320	1283.293633	0.607752718	0.23204988	2.61906069	0.008817226	0.0285691	Tead1
ENSMUSG00000110540	23.46108415	1.114392058	0.425547532	2.618725229	0.008825901	0.028592404	NA
ENSMUSG00000032187	3330.277155	0.536974247	0.205072411	2.61846167	0.008832721	0.028606698	Smarca4
ENSMUSG00000085385	612.1316192	0.647883563	0.247425605	2.618498447	0.008831769	0.028606698	NA
ENSMUSG00000079043	151.5451729	0.554935224	0.211963701	2.618067255	0.008842937	0.028635881	Fastkd5
ENSMUSG00000028832	2718.269258	1.436619115	0.548886318	2.617334532	0.008861944	0.028685699	Stmn1
ENSMUSG000000026889	1086.155387	0.737266765	0.281707595	2.617134855	0.00886713	0.028698576	Rbm18
ENSMUSG00000031075	891.8549682	0.935051458	0.357340127	2.616698735	0.008878466	0.028727438	Ano1
ENSMUSG00000045639	778.3181179	0.601210934	0.229771172	2.616563819	0.008881976	0.028734879	Zfp629
ENSMUSG00000047534	166.5934473	1.002514838	0.383158469	2.616449637	0.008884947	0.028740578	Mis18bp1
ENSMUSG00000002588	2.051533835	2.604263387	0.995453039	2.61615896	0.008892515	0.028757226	Pon1
ENSMUSG00000030042	828.4469403	0.696104747	0.266103925	2.615913109	0.00889892	0.028774023	Pole4
ENSMUSG00000063975	4.669758175	2.104695708	0.805004647	2.614513736	0.008935457	0.028872512	Slco1a5
ENSMUSG00000105867	10.5198355	1.63779246	0.626421919	2.614519718	0.0089353	0.028872512	NA
ENSMUSG00000028261	603.1904045	0.72644854	0.277944037	2.613650391	0.008958065	0.028933758	Ndufaf4
ENSMUSG00000055652	297.9208587	0.715266567	0.273695298	2.613368121	0.008965468	0.028949796	Klhl25
ENSMUSG000000043857	16.05325732	2.240282995	0.857461359	2.612692656	0.008983205	0.029003127	Mgat5b
ENSMUSG00000083580	3.002472153	2.41939955	0.926090691	2.612486632	0.008988621	0.02901667	NA
ENSMUSG00000002984	1827.18743	0.706313259	0.270367701	2.612417301	0.008990444	0.029018613	Tomm40
ENSMUSG00000002012	168.6747683	0.692749148	0.265307997	2.611112956	0.009024808	0.029113707	Pnck
ENSMUSG00000020287	572.7301572	0.52030158	0.199299269	2.610654741	0.009036908	0.029148782	Mpg
ENSMUSG00000000204	730.190283	1.249516162	0.478667696	2.610404194	0.00904353	0.029162223	Slfn4
ENSMUSG00000040940	3396.593698	0.658289944	0.252241983	2.609755663	0.009060691	0.029213597	Arhgef1
ENSMUSG00000033634	21.56218235	1.310373081	0.502260553	2.608950819	0.009082029	0.029274449	Nat8f2
ENSMUSG00000009731	63.58422916	1.001583206	0.383920436	2.608830144	0.009085233	0.029276829	Kcnd1
ENSMUSG00000051768	758.0114901	0.68377534	0.262134408	2.608491367	0.009094231	0.029297877	Xrcc1
ENSMUSG00000085550	18.85126991	1.513776503	0.580606663	2.607232397	0.009127739	0.029393867	NA
ENSMUSG00000011837	652.5375378	0.495449988	0.190116537	2.6060331	0.009159761	0.029484997	Snapc2
ENSMUSG00000024683	739.4123819	0.686588255	0.263553572	2.605118382	0.009184252	0.029555824	Mrpl16
ENSMUSG00000072694	438.6525911	0.820731781	0.315102633	2.604649072	0.00919684	0.029584311	1500011B03Rik
ENSMUSG00000084274	34.57586979	0.988360823	0.379515825	2.604267749	0.00920708	0.029605223	Gm12504
ENSMUSG00000049957	464.9526626	0.785121967	0.301519371	2.603885664	0.00921735	0.029622209	Ccdc137
ENSMUSG000000051989	458.7575193	0.652688825	0.25065938	2.603887492	0.009217301	0.029622209	Smim11
ENSMUSG00000046487	3.950543848	2.127802344	0.817219166	2.603710771	0.009222054	0.029631127	NA
ENSMUSG00000028789	296.4587069	1.066590153	0.409694874	2.603376857	0.009231042	0.029652593	Azin2
ENSMUSG00000042210	415.9053485	0.677200133	0.260126545	2.603348819	0.009231797	0.029652593	Abhd14a
ENSMUSG00000032440	3811.932848	0.689673657	0.264986899	2.602670777	0.009250073	0.029707279	Tgfb2
ENSMUSG00000027203	809.6387818	1.03509481	0.397715246	2.602602789	0.009251908	0.029709153	Dut
ENSMUSG00000073394	6.568622785	1.813478665	0.696883344	2.602270067	0.009260889	0.029733976	NA
ENSMUSG00000096177	1.523226848	2.720477342	1.045495202	2.602094526	0.009265631	0.02974518	NA
ENSMUSG00000028232	528.2707624	0.522222142	0.200714095	2.601820977	0.009273024	0.029764892	Tmem68
ENSMUSG00000042225	332.4693942	0.75173232	0.288994996	2.601194934	0.009289965	0.02981524	Ammecr1

ENSMUSG00000024498	1534.71038	0.745351705	0.286577799	2.60087037	0.009298758	0.029825109	Tcerg1
ENSMUSG00000035505	200.8311012	0.64240605	0.246991049	2.60092846	0.009297184	0.029825109	Cox18
ENSMUSG00000054418	15.39904715	1.501401965	0.577265404	2.600886791	0.009298313	0.029825109	NA
ENSMUSG00000026826	123.074822	1.069521137	0.411316813	2.600236853	0.009315944	0.029870368	Nr4a2
ENSMUSG00000029156	333.1883019	0.634105986	0.243873858	2.600139235	0.009318594	0.029874835	Sgcb
ENSMUSG00000021843	1668.645146	0.458708807	0.176484655	2.599142732	0.009345691	0.029953619	Ktn1
ENSMUSG00000107121	44.6864981	0.725619886	0.279228911	2.598656004	0.009358951	0.029992073	1110006O24Rik
ENSMUSG00000044702	94.0822559	0.881990911	0.339472788	2.59811962	0.009373583	0.030031796	Palb2
ENSMUSG00000086763	8.10602833	1.439876434	0.554201714	2.598108952	0.009373875	0.030031796	Plxna4os1
ENSMUSG00000031628	978.6044229	0.695561078	0.267807897	2.597238868	0.009397655	0.030103922	Casp3
ENSMUSG00000004897	7697.066997	0.621096405	0.239166214	2.596923684	0.009406282	0.030124176	Hdgf
ENSMUSG00000024608	24360.69263	0.693572091	0.267160873	2.596084087	0.009429299	0.030189005	NA
ENSMUSG00000020376	1339.775195	0.62626968	0.241276791	2.595648244	0.009441267	0.030219177	Rnf130
ENSMUSG00000022704	374.4251276	0.690428219	0.266035579	2.595247681	0.009452278	0.030250345	Qtrtd1
ENSMUSG00000033554	274.9054738	0.632681148	0.243803854	2.595041616	0.009457947	0.03026441	Dph5
ENSMUSG00000036036	67.60879062	1.024073551	0.394699788	2.594563215	0.00947112	0.030296095	Zfp57
ENSMUSG00000040521	612.3543347	0.841230417	0.324236148	2.59449917	0.009472884	0.030296095	Tsfm
ENSMUSG00000095789	15.82162452	1.133962167	0.437107052	2.594243587	0.00947993	0.030314337	Nupr1l
ENSMUSG00000030617	3.529963484	2.577246867	0.993619471	2.593796663	0.009492261	0.030345599	Ccdc83
ENSMUSG00000049409	14.65451529	1.299250376	0.500923586	2.593709723	0.009494661	0.030349189	Prokr1
ENSMUSG00000028689	240.701584	0.79247361	0.305544053	2.593647636	0.009496376	0.030350586	Ccdc163
ENSMUSG00000041491	118.857467	0.657134861	0.253432021	2.592943299	0.009515846	0.030408721	Cep78
ENSMUSG00000026810	1098.309223	0.540666042	0.208533156	2.592710207	0.009522297	0.030421152	Dpm2
ENSMUSG00000031250	5.869597556	2.00564385	0.773617562	2.59255212	0.009526674	0.030431045	Tnmd
ENSMUSG00000035696	1455.148011	0.370983346	0.143119662	2.592120059	0.009538648	0.03044882	Rnf38
ENSMUSG00000019863	323.7377302	0.505920239	0.195193346	2.591892858	0.009544949	0.030460749	Qrsl1
ENSMUSG00000107946	22.88268963	1.21370783	0.468336501	2.591529437	0.009555037	0.03048475	NA
ENSMUSG00000085702	8.391304855	1.779469824	0.686675311	2.591428287	0.009557846	0.030489618	NA
ENSMUSG00000028107	837.2558423	0.548214491	0.211562	2.591271067	0.009562214	0.030491269	Tars2
ENSMUSG00000005800	475.6567164	1.907796272	0.736273742	2.591150767	0.009565557	0.030497837	Mmp8
ENSMUSG00000085085	6.921481279	1.632159553	0.630013776	2.590672801	0.009578852	0.030536125	1700086P04Rik
ENSMUSG000000023913	2229.667023	1.256483377	0.48507961	2.5902622	0.009590285	0.030560271	Pla2g7
ENSMUSG00000025212	768.5756528	0.735212871	0.283891639	2.589765849	0.009604123	0.030592056	Sfxn3
ENSMUSG00000028609	1201.149637	0.735567905	0.284048605	2.589584644	0.00960918	0.030604058	Magoh
ENSMUSG00000032244	1353.46261	0.393975513	0.152271732	2.587318779	0.009672606	0.030785427	Fem1b
ENSMUSG00000061175	545.0080492	1.04704532	0.404769829	2.586767206	0.009688102	0.030823127	Fnip2
ENSMUSG00000074102	1328.250882	0.42746865	0.165252624	2.586758616	0.009688344	0.030823127	Rbm15b
ENSMUSG00000031353	4208.211283	0.730283935	0.282366964	2.586293829	0.009701419	0.030860593	Rbbp7
ENSMUSG00000034786	302.0227171	1.371665139	0.530513085	2.585544405	0.009722535	0.030915344	Gpsm3
ENSMUSG00000037376	952.1271082	0.720537435	0.278716337	2.585199861	0.009732256	0.030937975	Trmt6
ENSMUSG00000031347	623.2732352	0.912176631	0.352940945	2.584502149	0.00975197	0.030996493	Cetn2
ENSMUSG000000043391	660.8374948	1.294354619	0.500826032	2.584439577	0.009753739	0.030997971	2510009E07Rik
ENSMUSG00000022753	17.1228488	1.174129912	0.454325012	2.584339143	0.00975658	0.03100066	Tmem30c
ENSMUSG00000029414	177.9122569	1.258734312	0.487145589	2.583897586	0.00976908	0.031025971	Kntc1
ENSMUSG00000022665	849.5739946	1.440831895	0.557685703	2.583591238	0.00977776	0.031045238	Ccdc80
ENSMUSG00000078484	372.7171026	0.697243151	0.269895571	2.583381229	0.009783715	0.031059993	Klhl17
ENSMUSG00000008668	14256.99827	0.729755142	0.282518349	2.58303627	0.009793503	0.03108582	Rps18
ENSMUSG00000042213	34.16167815	0.923922247	0.357693158	2.583002296	0.009794467	0.03108582	Zfand4
ENSMUSG00000080775	5.96833012	1.819201287	0.704321578	2.582912896	0.009797005	0.031089722	NA
ENSMUSG00000021830	437.8349466	0.474229491	0.183634775	2.582460158	0.009809869	0.031126385	Txndc16
ENSMUSG00000025172	2.773319665	2.386019605	0.924086243	2.582031301	0.009822068	0.03114845	Ankrd2
ENSMUSG00000028637	55.20699585	0.632596352	0.244987449	2.582158214	0.009818456	0.03114845	Ccdc30
ENSMUSG00000040026	29386.88528	2.17530317	0.842454507	2.582101646	0.009820066	0.03114845	Saa3
ENSMUSG00000028850	231.4751259	0.480622335	0.186153498	2.581860348	0.009826934	0.031159723	Gpatch3
ENSMUSG00000041353	198.4587975	0.681697235	0.264124107	2.580973169	0.009852224	0.031219078	Tmem29
ENSMUSG00000020928	16.69137929	1.303913839	0.505300074	2.580474268	0.009866471	0.031242592	Higd1b
ENSMUSG00000107201	18.04795265	1.30397229	0.505330018	2.580437026	0.009867535	0.031242592	NA
ENSMUSG00000019027	18.52056702	1.345986821	0.521692517	2.580038579	0.009878928	0.031274495	Dnah1
ENSMUSG00000022876	226.8211023	1.639767737	0.635649068	2.579674573	0.009889346	0.031290797	Samsn1
ENSMUSG00000019362	2279.911642	0.599440999	0.232409322	2.579246796	0.009901602	0.031317062	D8ErtD738e
ENSMUSG00000049988	216.6817416	1.680369617	0.651674394	2.578541725	0.009921832	0.031376868	Lrrc25
ENSMUSG000000072572	29.55425052	0.844691608	0.327712337	2.57753985	0.009950641	0.031451227	Slc39a2
ENSMUSG00000108015	3.457798324	2.237201777	0.868004764	2.577407256	0.009954459	0.03145911	Gm32591
ENSMUSG00000033909	1112.712062	0.623687146	0.242059308	2.576588154	0.009978076	0.03152489	Usp36
ENSMUSG00000028545	141.9910361	0.820298653	0.318397568	2.576334546	0.009985398	0.031540104	Bend5
ENSMUSG00000028322	517.1543487	0.718693218	0.278972187	2.576218169	0.00998876	0.031546527	Exosc3
ENSMUSG00000056267	221.5100596	0.608998378	0.236439037	2.575709937	0.010003453	0.031584071	Cep70

ENSMUSG00000086272	2.912825791	2.740931882	1.064147149	2.575707585	0.010003521	0.031584071	NA
ENSMUSG00000003575	569.4595511	0.446752147	0.17349401	2.575029238	0.010023161	0.031634147	Crtc1
ENSMUSG00000049709	32.82954726	1.367251317	0.530978236	2.574966775	0.010024972	0.031635657	Nlrp10
ENSMUSG00000022902	39.28199808	2.350101996	0.912762707	2.574712988	0.01003233	0.031654672	Stfa2
ENSMUSG00000020692	449.4626764	0.831224361	0.322879324	2.574411859	0.010041067	0.031673826	Nle1
ENSMUSG00000025154	424.1956614	0.460146237	0.178778203	2.573838588	0.010057718	0.031722214	Arhgap19
ENSMUSG00000022420	416.6451558	0.573809058	0.222945572	2.573762971	0.010059917	0.031724861	Dnal4
ENSMUSG00000027823	1437.951602	0.723393874	0.281161223	2.572879244	0.010085639	0.031789099	Gmps
ENSMUSG00000042269	5.457868757	2.150892354	0.83615685	2.57235512	0.010100922	0.031828825	Fam92b
ENSMUSG00000027684	1253.6818	1.217611695	0.47340363	2.572037088	0.010110206	0.031853853	Mecom
ENSMUSG00000018672	215.9662658	0.959472283	0.373074709	2.571796641	0.01011723	0.031866166	Copz2
ENSMUSG00000024037	557.7705624	0.504115113	0.19606744	2.571131207	0.010136691	0.031907677	Wdr4
ENSMUSG00000085939	38.61348942	1.062509938	0.413267884	2.570995663	0.01014066	0.031915939	NA
ENSMUSG00000032402	1604.939048	0.421433193	0.163922672	2.570926821	0.010142676	0.031918056	Smad3
ENSMUSG00000051502	306.8277665	0.683926583	0.266101789	2.570169057	0.01016489	0.031975254	Ufsp1
ENSMUSG00000046470	194.7526561	0.988215739	0.384520185	2.569997046	0.010169938	0.0319869	Sox18
ENSMUSG00000031921	652.878959	0.469743604	0.182841101	2.569135727	0.010195252	0.032062272	Terf2
ENSMUSG00000056270	3.008404247	2.486791847	0.968030186	2.568919733	0.010201608	0.032078016	Prr9
ENSMUSG00000039628	6.113139754	2.020286134	0.786989651	2.567106355	0.010255115	0.032237729	Hs3st6
ENSMUSG00000020427	3658.101947	0.781469891	0.30443294	2.566968907	0.010259181	0.032246243	Igfbp3
ENSMUSG00000026039	169.0873424	1.134587049	0.442391301	2.564668535	0.010327441	0.032447916	Sgol2a
ENSMUSG00000079469	318.5299492	0.747378756	0.291462028	2.564240563	0.010340185	0.03248366	Pigb
ENSMUSG00000015776	1306.715149	0.601351344	0.234552517	2.563823874	0.010352606	0.032518381	Med22
ENSMUSG00000026073	910.4201861	1.806873241	0.704783505	2.563728048	0.010355465	0.032523059	Il1r2
ENSMUSG00000100291	7.826443533	1.68298342	0.65650737	2.563540788	0.010361053	0.032532007	2310069B03Rik
ENSMUSG00000026126	855.1209103	0.673722226	0.262870938	2.562939178	0.010379023	0.032584124	Ptpn18
ENSMUSG00000091580	6.996939351	1.495393431	0.583781426	2.56156391	0.010420207	0.032687499	NA
ENSMUSG00000105813	6.573399158	1.695328321	0.661853796	2.561484624	0.010422585	0.032690644	NA
ENSMUSG00000035370	173.9476212	0.544704348	0.212900915	2.558487585	0.010512857	0.032922048	Adat3
ENSMUSG00000035759	47.58740358	1.204518444	0.470978825	2.557478977	0.010543393	0.032999848	Bbs10
ENSMUSG00000025134	1019.73114	0.737828451	0.288544253	2.557072074	0.010555734	0.033025422	Alyref
ENSMUSG00000037020	157.225419	0.795756034	0.311233679	2.55677996	0.010564602	0.033048813	Wdr62
ENSMUSG00000091175	2.437759402	2.832488411	1.108073076	2.556228893	0.010581349	0.033096843	9130204L05Rik
ENSMUSG00000031960	3803.681831	0.67948768	0.265829359	2.556104726	0.010585126	0.033099994	Aars
ENSMUSG00000095369	6.154733468	1.969127836	0.770475044	2.555732144	0.010596465	0.03312232	Gm21859
ENSMUSG00000109251	5.830964422	1.871587542	0.732309106	2.555734354	0.010596398	0.03312232	NA
ENSMUSG00000026273	322.7272865	0.470084831	0.18394812	2.555529415	0.01060264	0.03313726	Mterf4
ENSMUSG00000027498	748.4308714	0.506651584	0.198314769	2.554784935	0.010625343	0.033190748	Cstf1
ENSMUSG00000039153	153.2073741	0.992474061	0.388578903	2.55411206	0.010645899	0.033241847	Runx2
ENSMUSG00000044847	205.9332174	0.470410644	0.184177527	2.554115318	0.010645799	0.033241847	Lsm11
ENSMUSG00000029755	4.296682068	2.515366204	0.984873704	2.553998745	0.010649364	0.033248297	Dlx5
ENSMUSG00000032175	25964.46376	0.947158777	0.37087204	2.553869464	0.010653319	0.033256273	Bsg
ENSMUSG00000032174	6.611522306	1.611476775	0.631176218	2.553132913	0.010675875	0.033313553	Icam5
ENSMUSG00000034453	599.6622769	0.502621439	0.196884197	2.552878532	0.010683675	0.033333514	Polr3b
ENSMUSG00000005699	112.3054226	0.905607212	0.354779247	2.552593534	0.01069242	0.033352038	Pard6a
ENSMUSG00000031372	28.610654	1.705859635	0.668275089	2.55263089	0.010691273	0.033352038	Trex2
ENSMUSG00000051367	5.297738568	2.318506878	0.908531765	2.551927151	0.010712892	0.033402737	Six1
ENSMUSG00000006998	6103.208617	0.756619215	0.296503016	2.55180951	0.010716509	0.033409632	Psm2
ENSMUSG00000033790	323.0928974	0.45020214	0.176427859	2.551763322	0.01071793	0.033409676	Tubgcp5
ENSMUSG00000018669	2052.551856	0.552726362	0.216619599	2.55159905	0.010722984	0.033416661	Cdk5rap3
ENSMUSG00000033898	54.64847206	1.612253893	0.631986494	2.551089159	0.010738685	0.033452426	Cfhr2
ENSMUSG00000022299	462.6314159	0.819818582	0.321389683	2.550855317	0.010745893	0.033470489	Slc25a32
ENSMUSG00000032172	40.65051191	1.235338136	0.484401043	2.550238388	0.010764928	0.033516597	Olfm2
ENSMUSG00000039105	2632.049375	0.536794873	0.21054929	2.54949743	0.010787831	0.033574702	Atp6v1g1
ENSMUSG00000054520	612.672952	0.672271367	0.263713191	2.549251953	0.010795428	0.033593945	Sh3bp2
ENSMUSG00000033096	1192.649132	0.5213751	0.204545886	2.548939553	0.010805103	0.033619649	Apm2
ENSMUSG00000020515	1219.1384	0.484709506	0.190165061	2.54888834	0.010806689	0.033620183	Cnot8
ENSMUSG00000038268	205.0985946	1.000695237	0.392710206	2.548177311	0.010828742	0.033675558	Ovca2
ENSMUSG00000009545	3055.595317	0.940423422	0.369067918	2.548103955	0.010831019	0.033678232	Kcnq1
ENSMUSG00000025613	5754.56666	0.578077006	0.226883319	2.547904399	0.010837217	0.033693092	Cct8
ENSMUSG00000019952	638.8422501	0.615657303	0.241658081	2.547637973	0.010845496	0.03371442	Poc1b
ENSMUSG00000036103	662.5071303	1.214541459	0.477051715	2.545932488	0.010898626	0.033861858	Colec12
ENSMUSG00000031505	1408.391156	0.516579393	0.202908565	2.545872782	0.010900491	0.033863222	Naxd
ENSMUSG00000030268	34.32552354	1.557123467	0.611704372	2.545549024	0.010910604	0.033890208	Bcat1
ENSMUSG00000022428	274.4899794	0.783122593	0.307782697	2.544400973	0.010946535	0.033988482	Cby1
ENSMUSG00000032575	3572.716005	0.782319294	0.307495599	2.544164196	0.010953958	0.033999557	Manf
ENSMUSG00000089929	40.16490236	1.312683352	0.516068267	2.543623465	0.010970928	0.034046422	Bcl2a1b

ENSMUSG00000070287	118.3304316	0.986519141	0.387884782	2.54333036	0.010980136	0.034070547	Slc35g2
ENSMUSG00000006179	59.85688484	0.939914322	0.369630751	2.542846665	0.010995347	0.034108835	Prss16
ENSMUSG000000050410	440.1085174	1.09634773	0.431172432	2.542712956	0.010999555	0.034117434	Tcf19
ENSMUSG000000035726	2297.440392	0.679382147	0.267282293	2.541815019	0.011027852	0.034196274	Supt16
ENSMUSG000000023004	2110.710008	1.058418429	0.416415316	2.541737514	0.011030297	0.034196955	Tuba1b
ENSMUSG000000026072	800.1268191	0.995162489	0.391545668	2.541625591	0.01103383	0.034196955	Il1r1
ENSMUSG000000034112	605.3144119	0.858313828	0.337697642	2.541663673	0.011032628	0.034196955	Atp2c2
ENSMUSG000000040102	341.2487675	0.706681919	0.278034062	2.54170987	0.01103117	0.034196955	Klhl42
ENSMUSG000000034206	99.99122836	1.010151117	0.397462561	2.541500047	0.011037793	0.034204776	Polq
ENSMUSG000000001424	4432.074257	0.579631645	0.228122124	2.540883078	0.011057289	0.034238394	Snd1
ENSMUSG000000020778	604.296092	0.601268403	0.236630373	2.540960382	0.011054845	0.034238394	Ten1
ENSMUSG000000030406	36.56301669	1.520616089	0.598453727	2.540908378	0.011056489	0.034238394	Gipr
ENSMUSG000000004099	1335.192337	0.758184595	0.298418674	2.540674098	0.0110639	0.034254398	Dnmt1
ENSMUSG000000008140	2742.648621	0.517340816	0.203647313	2.540376343	0.011073324	0.03427911	Emc10
ENSMUSG000000037894	3124.557785	0.908315943	0.357560822	2.540311709	0.011075371	0.034280979	H2afz
ENSMUSG000000045667	195.1680477	1.094020889	0.430689214	2.540163194	0.011080075	0.034291073	Smtnl2
ENSMUSG000000079553	232.365258	1.071237599	0.421866257	2.539282492	0.011108009	0.034364092	Kifc1
ENSMUSG000000036097	698.5904411	0.55346053	0.218105357	2.537583383	0.011162077	0.034516338	Fam178a
ENSMUSG000000024312	703.1382787	0.584001684	0.230172151	2.537238681	0.011173075	0.034538395	Wdr46
ENSMUSG000000028455	1348.310487	0.560163434	0.220822959	2.536708304	0.011190015	0.034581761	Stoml2
ENSMUSG000000024590	1888.711008	0.904288259	0.356555933	2.536175046	0.01120707	0.034625459	Lmnbl
ENSMUSG000000040118	767.5683181	1.31788906	0.519650958	2.53610436	0.011209332	0.034627945	Cacna2d1
ENSMUSG000000039630	9958.283343	0.393303859	0.155108855	2.535663485	0.011223453	0.034658045	Hnrnpu
ENSMUSG000000054342	1421.094898	0.847730963	0.334319179	2.535693478	0.011222492	0.034658045	Kcnn4
ENSMUSG000000021810	849.0469738	0.562364513	0.221799471	2.535463722	0.011229856	0.034668805	Ecd
ENSMUSG000000047053	2.576593232	2.824803169	1.114235393	2.535194256	0.011238499	0.034690979	Teddm1a
ENSMUSG000000025578	190.8386974	1.118197354	0.441152098	2.534720698	0.011253701	0.034729196	Cbx8
ENSMUSG000000036282	1046.009066	0.537788325	0.212168938	2.534717527	0.011253803	0.034729196	Naa30
ENSMUSG000000006800	4250.489327	0.884374609	0.348993032	2.534075261	0.011274451	0.034775904	Sulf2
ENSMUSG000000029122	243.7314656	0.920175883	0.363122503	2.534064606	0.011274794	0.034775904	Evc
ENSMUSG000000036202	533.0835773	0.675544114	0.266631326	2.5336262	0.011288908	0.034806137	Rif1
ENSMUSG0000000052146	10022.16852	0.636950615	0.251404939	2.533564445	0.011290898	0.034806137	Rps10
ENSMUSG000000086904	6.375747062	1.966519996	0.776196824	2.533532648	0.011291922	0.034806137	NA
ENSMUSG000000086381	2.880578432	2.41854272	0.954677174	2.533361837	0.011297427	0.034816115	AV064505
ENSMUSG000000022438	298.0000129	0.943236912	0.372393532	2.532903587	0.011312206	0.03483702	Parvb
ENSMUSG000000029388	1402.461567	0.671536888	0.265112736	2.533023865	0.011308325	0.03483702	Eif2b1
ENSMUSG000000020307	1419.756362	0.552581991	0.218226615	2.532147561	0.011336627	0.034894133	Cdc34
ENSMUSG000000044906	93.18972399	0.840270602	0.33198402	2.531057372	0.011371925	0.034998243	4930503L19Rik
ENSMUSG000000068245	174.1776601	1.110018929	0.438568792	2.531003001	0.011373688	0.034999135	Phf11d
ENSMUSG000000021123	95.08832121	1.492701658	0.589779482	2.530948774	0.011375446	0.035000012	Rdh12
ENSMUSG000000024026	2757.019026	0.68249713	0.269683179	2.530736744	0.011382324	0.035012106	Glo1
ENSMUSG0000000057191	265.941883	1.71058824	0.676018306	2.530387453	0.011393663	0.035042447	AB124611
ENSMUSG000000031723	299.9636545	0.621940089	0.245813406	2.530130878	0.011401999	0.035063544	Txn14b
ENSMUSG000000026779	168.316082	1.137004522	0.449570085	2.529092924	0.011435775	0.03515831	Mastl
ENSMUSG000000041984	3.147430006	2.848130651	1.126514845	2.528267305	0.011462704	0.035231984	Rptn
ENSMUSG000000023940	254.988438	1.113460863	0.440427936	2.528134052	0.011467056	0.0352408	Sgol1
ENSMUSG000000003444	441.7443411	0.669418166	0.264828923	2.527738128	0.011479994	0.035266875	Med29
ENSMUSG000000001783	5037.636385	0.44880236	0.17759957	2.527046439	0.011502629	0.035326961	Rtcb
ENSMUSG000000050796	180.8911816	0.816821524	0.323237114	2.527004139	0.011504015	0.035326961	B3galt6
ENSMUSG000000039577	24.63661475	0.956236035	0.378500026	2.526383007	0.011524377	0.035384915	Nphp4
ENSMUSG000000020290	1805.299698	0.62786017	0.248562128	2.525968764	0.011537974	0.035422087	Xpo1
ENSMUSG000000049396	11.99069812	1.236069524	0.48955663	2.524875466	0.01157393	0.035514114	Gemin4
ENSMUSG000000046096	422.7870532	0.581375842	0.230285638	2.524585756	0.011583474	0.035534221	BC030336
ENSMUSG000000060636	5288.808295	0.7842959	0.310659769	2.524613673	0.011582554	0.035534221	Rpl35a
ENSMUSG000000062210	708.5528098	0.960517404	0.380559442	2.523961562	0.011604062	0.035586595	Tnfaip8
ENSMUSG000000072082	379.598741	1.068478685	0.423338953	2.523931895	0.011605041	0.035586595	Ccnf
ENSMUSG000000052496	35.66822289	0.962429993	0.381422482	2.523264983	0.011627075	0.03564956	Pkdrej
ENSMUSG000000036957	217.771577	0.687724399	0.272667748	2.522206617	0.011662119	0.035738556	Lrfn3
ENSMUSG000000020525	331.6606176	0.431028603	0.170901323	2.522090501	0.011665969	0.035745745	Ppm1d
ENSMUSG000000039748	186.4708274	1.236030455	0.490109272	2.521948727	0.011670672	0.035750932	Exo1
ENSMUSG0000000001415	2072.621699	0.416785143	0.165345063	2.520699049	0.011712198	0.035859642	Smg5
ENSMUSG0000000071866	11615.73323	0.750038313	0.297578805	2.520469536	0.011719838	0.035878412	Ppia
ENSMUSG000000067150	653.120985	0.657354404	0.260850936	2.520038511	0.0117342	0.035913121	Xpo5
ENSMUSG000000029070	1534.09267	1.189369441	0.472159353	2.519000065	0.011768864	0.036005296	Mxra8
ENSMUSG000000014771	442.9853038	0.545450777	0.216556953	2.51874054	0.011777541	0.036027203	Pdcd2
ENSMUSG000000040263	794.4001689	0.63346177	0.251555569	2.518178278	0.01179636	0.036080123	Klhdcl4
ENSMUSG000000028555	1051.96217	1.101704092	0.437579723	2.517721992	0.011811651	0.036111265	Ttc39a



ENSMUSG00000082809	4.673719619	1.784380482	0.708749071	2.517647719	0.011814142	0.036111265	NA
ENSMUSG00000019845	62.95401108	0.807983729	0.320949238	2.517481376	0.011819722	0.03611628	Tube1
ENSMUSG00000021536	57.76595236	1.008103779	0.400434072	2.517527478	0.011818175	0.03611628	Adcy2
ENSMUSG00000021760	165.6185469	0.853427046	0.339002836	2.517462853	0.011820343	0.03611628	Gpx8
ENSMUSG00000094910	129.7160096	1.121404061	0.445699568	2.51605373	0.011867709	0.036251677	D430019H16Rik
ENSMUSG00000068969	7.126883126	1.576174196	0.626472039	2.515952984	0.011871102	0.036257379	NA
ENSMUSG00000042106	23.21674623	1.250922575	0.49725256	2.515668447	0.011880689	0.036279736	Fam212a
ENSMUSG00000063816	13.8729416	1.116891473	0.444125982	2.514807778	0.01190973	0.03634732	NA
ENSMUSG00000002014	3398.291546	0.531485894	0.211407695	2.514032877	0.011935931	0.036413249	Ssr4
ENSMUSG00000026035	331.3444714	0.611674331	0.243472018	2.512298278	0.011994766	0.036583343	Ppil3
ENSMUSG00000079435	6428.446091	0.615691273	0.245083983	2.512164461	0.011999315	0.036592521	Rpl36a
ENSMUSG00000055003	14.90848096	1.54237845	0.614151094	2.511399011	0.012025369	0.036662559	Lrtm2
ENSMUSG00000036231	67.41782443	1.391299091	0.554018726	2.511285316	0.012029243	0.036669664	Agr3
ENSMUSG00000086552	14.42647605	2.233669253	0.88950463	2.511138424	0.01203425	0.03668022	Dlx4os
ENSMUSG00000089662	6.431876686	1.528752965	0.609027452	2.510154446	0.012067837	0.036773157	NA
ENSMUSG00000078686	1.676007764	2.695904342	1.074093956	2.509933444	0.012075392	0.036791459	Mup9
ENSMUSG00000054434	74.9562114	0.85627895	0.341216224	2.509490731	0.012090539	0.036832886	Tmem120b
ENSMUSG00000028936	6755.500199	0.587234641	0.234017175	2.509365569	0.012094824	0.036837505	NA
ENSMUSG00000020801	199.9517158	0.670798585	0.267342355	2.509136962	0.012102655	0.036850893	Med31
ENSMUSG00000034686	55.07615529	1.216355183	0.484768287	2.5091476	0.01210229	0.036850893	Prr7
ENSMUSG00000097398	6.433718383	1.921781273	0.766124272	2.50844588	0.012126354	0.036918323	Platr5
ENSMUSG00000090399	7.046188527	1.419834095	0.566075074	2.508208115	0.012134517	0.036938441	NA
ENSMUSG00000024059	227.3897087	1.088838209	0.434200847	2.507683293	0.012152553	0.036983866	Clip4
ENSMUSG00000110355	2.563195433	2.607835789	1.03993638	2.507687816	0.012152398	0.036983866	NA
ENSMUSG00000027353	100.6664607	0.779532569	0.311166762	2.50519228	0.012238484	0.037212009	Mcm8
ENSMUSG00000029605	71.80138058	1.179760707	0.471085047	2.504347598	0.012267744	0.037296204	Oas1b
ENSMUSG00000029185	1129.812378	0.437243241	0.174607944	2.504142889	0.012274845	0.037313016	Fam114a1
ENSMUSG00000024194	1401.320503	0.636216691	0.254112176	2.503684404	0.012290761	0.037351839	Cuta
ENSMUSG00000042719	893.1360425	0.621337877	0.248218991	2.503184285	0.012308144	0.03739988	Naa25
ENSMUSG00000046070	35.33882538	1.728374033	0.690533633	2.502954165	0.012316149	0.03741942	Igfals
ENSMUSG00000030786	832.7256456	1.257304354	0.502545389	2.501872234	0.01235385	0.037529163	Itgam
ENSMUSG00000012428	562.2185364	1.013272788	0.405047185	2.501616668	0.01236277	0.03755146	Steap4
ENSMUSG00000020895	154.2190089	1.095174766	0.43788338	2.501064933	0.012382047	0.037605205	Tmem107
ENSMUSG00000086965	24.21360959	1.181415957	0.472520123	2.500244754	0.012410753	0.037673122	NA
ENSMUSG00000097004	8.719177765	1.519725227	0.607866426	2.500097324	0.012415919	0.037683988	NA
ENSMUSG00000015120	3171.773478	0.484292573	0.193834468	2.498485323	0.012472531	0.037836476	NA
ENSMUSG00000062687	4.519059923	1.855220628	0.742810209	2.497570181	0.012504771	0.037924593	Cks1brt
ENSMUSG00000009406	223.7336055	0.586544194	0.234878763	2.497221061	0.01251709	0.037952264	Elk1
ENSMUSG00000026276	4168.242402	0.575016624	0.230312716	2.496677712	0.012536284	0.038005609	Sept2
ENSMUSG00000059975	88.25085516	0.68436915	0.274169906	2.496149782	0.012554958	0.03805251	Zfp74
ENSMUSG00000086716	1.586727901	2.670658359	1.070231618	2.495402223	0.012581442	0.038098757	NA
ENSMUSG00000042759	247.4342117	1.35927094	0.545030235	2.493936763	0.012633505	0.038232044	Apobr
ENSMUSG00000056895	65.16518655	1.346217742	0.539927476	2.49333068	0.012655093	0.038287618	Hist3h2ba
ENSMUSG00000026854	581.3082277	0.713116919	0.286027352	2.493177359	0.012660559	0.038299279	Usp20
ENSMUSG00000017716	1069.519208	1.118900304	0.449410095	2.489708881	0.012784777	0.03863569	Birc5
ENSMUSG00000074677	66.97370207	1.733106195	0.696310611	2.488984322	0.012810861	0.038699749	LOC100038947
ENSMUSG00000044405	43.97718155	1.328038731	0.533588203	2.488883234	0.012814504	0.038705832	Adig
ENSMUSG00000081222	3.166854251	2.278473801	0.915552118	2.488633642	0.012823503	0.038728088	NA
ENSMUSG00000031691	2204.619237	0.522187699	0.209837881	2.488529224	0.012827269	0.038734538	Tnpo2
ENSMUSG00000023930	5.650215896	2.033798275	0.81753477	2.487720826	0.012856461	0.038812821	Crisp2
ENSMUSG00000085761	8.048238986	1.556939047	0.626004251	2.487106188	0.012878695	0.038865127	4930455G09Rik
ENSMUSG00000071302	446.9437285	0.497020569	0.199913072	2.486183435	0.012912139	0.038961105	2610044O15Rik8
ENSMUSG00000032322	342.2566056	1.458648282	0.586749337	2.485981986	0.012919451	0.038973266	Pstpip1
ENSMUSG00000028539	30.21480265	1.176937341	0.473442408	2.485914486	0.012921901	0.038975709	Artn
ENSMUSG00000042854	84.66815914	0.613944492	0.246996403	2.485641423	0.012931819	0.039000673	Trp53rkb
ENSMUSG00000029918	654.0202733	0.57077266	0.229780677	2.483988945	0.012991984	0.039162235	NA
ENSMUSG00000033961	127.3870587	0.716657592	0.288548373	2.483665335	0.013003795	0.03919109	Zfp446
ENSMUSG00000058064	27.66036439	0.940017259	0.378484267	2.483636287	0.013004856	0.03919109	NA
ENSMUSG00000006154	279.312161	1.024776057	0.412668842	2.48328915	0.013017537	0.03922433	Eps8l1
ENSMUSG00000033039	1201.539533	0.420533689	0.169400632	2.48248005	0.013047137	0.039308535	Micall1
ENSMUSG00000025816	432.5588691	0.433857265	0.174785115	2.482232343	0.013056211	0.039330885	Sec61a2
ENSMUSG00000004419	182.3870731	0.663593926	0.267433774	2.481339268	0.013088973	0.039419578	Nkrf
ENSMUSG00000025475	8.009420077	1.732875254	0.698645491	2.480335557	0.013125879	0.039513464	Adgra1
ENSMUSG00000019942	1178.328469	1.244791234	0.501928186	2.480018592	0.013137553	0.039540823	Cdk1
ENSMUSG00000037347	25.64897724	1.088953223	0.439376424	2.47840613	0.013197083	0.039704403	Chst7
ENSMUSG00000082792	18.26042013	0.951126328	0.383771624	2.478365435	0.013198589	0.039704403	NA
ENSMUSG00000046329	881.5255397	0.643956249	0.259913825	2.477575976	0.013227824	0.039782275	Slc25a23



ENSMUSG00000087600	2.520840778	2.329258091	0.940172259	2.477480129	0.013231378	0.039787925	NA
ENSMUSG00000022304	1.517864975	2.645430629	1.068056115	2.476864831	0.013254209	0.039846492	Dpys
ENSMUSG00000031927	1.517864975	2.645430629	1.068056115	2.476864831	0.013254209	0.039846492	1700012B09Rik
ENSMUSG00000025980	5865.211155	0.807049524	0.325874899	2.476562403	0.013265443	0.039875221	Hspd1
ENSMUSG00000032305	297.6945522	0.642236616	0.259445288	2.475422164	0.013307877	0.039982537	Fam219b
ENSMUSG00000036896	2128.50181	1.073393969	0.433616978	2.47544267	0.013307112	0.039982537	C1qc
ENSMUSG00000035351	279.9847175	0.836137441	0.337854948	2.474841485	0.013329532	0.04002735	Nup37
ENSMUSG00000045045	1091.891397	0.971380687	0.392568176	2.474425454	0.013345067	0.040068934	Lrfn4
ENSMUSG00000028926	148.8712477	0.903942013	0.365383173	2.473956329	0.013362603	0.04010638	Cdk14
ENSMUSG00000087138	145.6936222	0.987871534	0.399303104	2.47398912	0.013361377	0.04010638	Gm15545
ENSMUSG00000031310	652.2267207	0.39456535	0.159505603	2.47367706	0.013373052	0.040132671	Zmym3
ENSMUSG00000006585	808.3312064	0.701639998	0.283701053	2.473166702	0.013392166	0.04018025	Cdt1
ENSMUSG00000031825	1508.465234	1.291853528	0.522484532	2.472520137	0.013416415	0.04023739	Crispld2
ENSMUSG00000053317	1854.198024	0.779131694	0.315254759	2.471435157	0.013457195	0.040339323	Sec61b
ENSMUSG00000068882	3420.507014	0.571391622	0.231203178	2.471383082	0.013459155	0.040340108	Ssb
ENSMUSG00000039345	176.3380503	0.77760178	0.31469151	2.470997008	0.013473695	0.040361367	Mettl122
ENSMUSG00000040936	38.63603471	0.705527927	0.285532192	2.470922536	0.013476501	0.040361367	Ulk4
ENSMUSG00000045551	217.1187603	1.96394738	0.794848564	2.470844722	0.013479433	0.040361367	Fpr1
ENSMUSG00000052281	2.110487495	2.505009131	1.013831446	2.470833926	0.01347984	0.040361367	NA
ENSMUSG00000026427	901.520424	0.575613834	0.233042897	2.469990896	0.013511649	0.040446413	Eif2d
ENSMUSG00000020424	127.8439973	1.056855013	0.427892063	2.469910298	0.013514694	0.04045043	Gatsl3
ENSMUSG00000022037	37994.37354	1.784530416	0.722535985	2.469815278	0.013518284	0.040450982	Clu
ENSMUSG00000059108	233.3276926	1.488533499	0.60268379	2.469841605	0.013517289	0.040450982	Ifitm6
ENSMUSG00000045948	829.862627	0.647577345	0.262226739	2.469532082	0.013528989	0.040477916	Mrps12
ENSMUSG00000065037	60.61297133	1.094142781	0.443104635	2.469265031	0.01353909	0.040499707	Rn7sk
ENSMUSG00000083844	264.0539105	0.395038658	0.159983296	2.469249403	0.013539682	0.040499707	Ube2d-ps
ENSMUSG00000035585	895.8777059	0.670533311	0.271597746	2.468847109	0.013554912	0.040535056	Tsen34
ENSMUSG00000061787	7225.551304	0.541217556	0.219227273	2.46875103	0.013558552	0.040539735	Rps17
ENSMUSG00000001829	624.0288445	0.684914069	0.27744853	2.468616677	0.013563643	0.040540752	Clpb
ENSMUSG00000040430	498.317488	0.622675586	0.252234754	2.468635171	0.013562942	0.040540752	Pitpnc1
ENSMUSG00000030528	169.7515804	1.029883665	0.41720673	2.468521217	0.013567261	0.040541662	Blm
ENSMUSG000000030730	9.018417944	1.431183675	0.579800869	2.468405534	0.013571647	0.04054937	Atp2a1
ENSMUSG00000028018	283.9393908	0.763881687	0.309506893	2.468060342	0.013584742	0.040583391	Gstcd
ENSMUSG00000029553	38.58316516	1.519657302	0.615784774	2.467838384	0.013593168	0.040603457	Tfec
ENSMUSG00000013974	204.9865017	1.813970485	0.735149363	2.467485624	0.013606568	0.040612846	Mcomp1
ENSMUSG00000026309	1477.782154	0.606780947	0.245908759	2.467504406	0.013605855	0.040612846	Ilkap
ENSMUSG00000028417	6.752054377	1.687528888	0.683870846	2.467613436	0.013601712	0.040612846	Tal2
ENSMUSG00000063785	774.9718707	0.509621691	0.206531528	2.467524919	0.013605075	0.040612846	Utp14a
ENSMUSG00000025644	11.35596145	1.805533844	0.732000349	2.466575115	0.013641211	0.040695795	NA
ENSMUSG00000050010	28.00217985	1.532989255	0.621518189	2.466523557	0.013643175	0.040696544	Shisa3
ENSMUSG00000087862	70.20437981	0.786582057	0.318916614	2.466419191	0.013647152	0.040703294	Haus5
ENSMUSG00000031487	188.9147473	0.434470102	0.176172725	2.466159852	0.013657037	0.040717441	Atf2
ENSMUSG00000075378	3.19176099	2.170918555	0.880381693	2.465883345	0.013667584	0.040743772	Olfir361
ENSMUSG00000015971	677.0243068	0.464709036	0.188464915	2.465758868	0.013672334	0.040744699	Actr8
ENSMUSG00000019437	197.6031801	0.751369036	0.304716668	2.465795656	0.01367093	0.040744699	Tlcd1
ENSMUSG00000038055	436.9642191	0.972907377	0.394599841	2.465554409	0.01368014	0.040760742	Dexi
ENSMUSG00000031872	71.80555016	1.088985685	0.441782443	2.464981809	0.013702021	0.040790784	Bean1
ENSMUSG00000055932	1398.320141	0.455391008	0.184735226	2.4651011	0.01369746	0.040790784	Fto
ENSMUSG00000087574	20.53080524	1.140784004	0.4627972	2.464976028	0.013702242	0.040790784	NA
ENSMUSG00000102353	6.439906106	1.890165915	0.766793138	2.465027164	0.013700286	0.040790784	NA
ENSMUSG00000006235	23.12338439	1.174023056	0.476299826	2.464882396	0.013705823	0.040796332	Epor
ENSMUSG000000066148	906.6534161	0.646435383	0.262292535	2.464558834	0.013718204	0.040819534	Prpf4
ENSMUSG00000024742	797.9702327	0.929569874	0.377247281	2.464086346	0.013736302	0.040861455	Fen1
ENSMUSG00000040212	533.9535556	1.116439577	0.453108016	2.463959007	0.013741183	0.040870857	Emp3
ENSMUSG00000022359	390.3159136	0.788132051	0.319985999	2.463020427	0.013777207	0.040967746	Wdyhv1
ENSMUSG00000043091	2525.294185	0.826854011	0.335737884	2.462796276	0.013785822	0.040988234	Tuba1c
ENSMUSG00000028175	77.11279351	1.089897627	0.442597502	2.462502887	0.013797106	0.041011518	Depdc1a
ENSMUSG00000020708	3875.149115	0.482300655	0.195922879	2.461686236	0.013828558	0.041089585	Psmc5
ENSMUSG00000034761	769.480825	0.62957113	0.255747609	2.461689217	0.013828443	0.041089585	Map4k5
ENSMUSG00000037418	63.32703203	1.563087335	0.635502795	2.459607332	0.01390891	0.041312837	Best1
ENSMUSG00000101026	2.932599643	2.408192464	0.979204898	2.459334578	0.013919483	0.041339072	D730001G18Rik
ENSMUSG00000027642	10696.70799	0.626156481	0.25471719	2.458241946	0.013961908	0.041459885	Rpn2
ENSMUSG00000108688	906.5532128	0.914796426	0.372182062	2.457927235	0.013974148	0.041485862	NA
ENSMUSG00000050147	49.68785241	1.005923352	0.409335909	2.45745201	0.01399265	0.04153041	F2rl3
ENSMUSG00000023967	1145.029714	0.659480551	0.268371173	2.457344962	0.013996821	0.04153417	Mrps18a
ENSMUSG00000075587	6.825206903	1.540963985	0.627268106	2.45662735	0.014024808	0.041610259	NA
ENSMUSG00000085723	13.36687647	1.31429325	0.535151598	2.455926983	0.014052171	0.041681029	Gm15915

ENSMUSG00000036887	2611.397	1.058343145	0.430948031	2.455848664	0.014055233	0.041684909	C1qa
ENSMUSG00000052631	430.227402	1.255366796	0.511305144	2.455220352	0.014079825	0.041737002	Sh2d6
ENSMUSG00000034601	147.0088783	0.781239522	0.318229844	2.454953668	0.014090275	0.041762766	2700049A03Rik
ENSMUSG00000025036	219.8491573	0.577521107	0.23530877	2.454311866	0.01411545	0.041826942	Sfxn2
ENSMUSG00000092130	9.047959676	1.612939297	0.657197954	2.454267068	0.014117209	0.041826942	NA
ENSMUSG00000037197	1818.551445	0.544116136	0.221765723	2.453562828	0.014144883	0.041898483	Rbm17
ENSMUSG00000067925	138.3504951	0.590263062	0.240653532	2.452750467	0.014176864	0.041982747	Cxx1a
ENSMUSG00000106944	14.07748471	1.177232338	0.480240441	2.45133945	0.014232566	0.042131943	NA
ENSMUSG00000042524	1702.807895	0.775117169	0.316228171	2.451132573	0.014240749	0.042150914	Sun2
ENSMUSG00000016206	327.2574351	0.892080458	0.364051263	2.450425389	0.014268753	0.042212764	H2-M3
ENSMUSG00000071984	602.1036776	1.157588228	0.472395034	2.450466548	0.014267122	0.042212764	Fndc1
ENSMUSG00000045064	38.21702351	1.140713746	0.465612095	2.449922927	0.01428868	0.042255928	Zc2hc1c
ENSMUSG00000027671	1175.016179	0.660665689	0.269687552	2.449744844	0.014295748	0.042271569	Actl6a
ENSMUSG00000020372	33036.76475	0.558792125	0.228148973	2.44924234	0.014315709	0.042325326	Rack1
ENSMUSG00000029012	563.1910224	0.581877237	0.237596485	2.449014503	0.014324768	0.042346838	Orc5
ENSMUSG00000102123	1.371657481	2.584996593	1.055589782	2.448864737	0.014330725	0.042359178	NA
ENSMUSG00000026274	149.7881032	0.881479501	0.360104782	2.447841694	0.014371478	0.042463786	Pask
ENSMUSG00000030353	95.15323703	1.302266053	0.532161096	2.4471275	0.014399989	0.042542735	Tead4
ENSMUSG00000106628	12.60046345	1.101028766	0.449961239	2.446941357	0.014407428	0.04255942	NA
ENSMUSG00000015697	947.4053336	0.468885617	0.191718004	2.445704671	0.014456937	0.042673831	Setdb1
ENSMUSG00000109810	9.939354703	1.368137493	0.559625785	2.444736341	0.014495807	0.042777937	NA
ENSMUSG00000049728	240.9549336	0.519588113	0.212658653	2.443296356	0.014553781	0.042938352	Zfp668
ENSMUSG00000095687	225.0810662	1.060732394	0.434215677	2.44286987	0.01457099	0.042983788	Rnaset2a
ENSMUSG00000087090	3.042469172	2.464045756	1.008741568	2.442692791	0.014578141	0.042999542	Nctc1
ENSMUSG00000025161	3704.801907	0.785623123	0.321838407	2.441048383	0.014644693	0.0431744	Slc16a3
ENSMUSG00000033940	3089.697474	0.462306143	0.189422262	2.440611457	0.014662421	0.043221301	Brk1
ENSMUSG00000025900	2.15755801	2.539067123	1.040368313	2.440546383	0.014665063	0.043223725	Rp1
ENSMUSG00000022020	316.7595884	0.424516847	0.173953397	2.440405611	0.014670779	0.04323521	Naa16
ENSMUSG00000036860	555.6334174	0.478787352	0.19620563	2.440232483	0.014677813	0.043250573	Mrpl55
ENSMUSG00000024991	5844.488995	0.478458998	0.196075779	2.440173892	0.014680194	0.043252223	Eif3a
ENSMUSG00000079654	14.03431028	1.176991748	0.482644378	2.438631424	0.014742997	0.043410341	Prrt4
ENSMUSG000000018974	1115.39449	0.468394323	0.192076275	2.438584992	0.014744891	0.043410538	Sart3
ENSMUSG00000027331	554.1579909	0.993953381	0.407650909	2.438246446	0.014758708	0.043435938	Knstrn
ENSMUSG00000086219	1.622902044	2.632019223	1.079475389	2.438239213	0.014759004	0.043435938	Srrm4os
ENSMUSG00000072941	937.7909237	1.117217732	0.458276988	2.43786566	0.014774263	0.043472162	Sod3
ENSMUSG00000033967	20.90496189	1.382593696	0.567172163	2.437696677	0.014781171	0.043485015	Rnf225
ENSMUSG00000049299	1115.305312	0.64426152	0.264314871	2.437477381	0.01479014	0.043506012	Trappc1
ENSMUSG00000035666	615.6646941	0.469480235	0.192670085	2.436705392	0.014821749	0.043582805	Gtf3c4
ENSMUSG00000040883	885.5759069	0.828773467	0.340290128	2.435490773	0.014871604	0.043702402	Tmem205
ENSMUSG00000097519	7.314396119	1.561076701	0.64101528	2.435319017	0.014878666	0.043702402	4930558J18Rik
ENSMUSG00000035279	232.9558181	1.328804905	0.545666394	2.435196521	0.014883704	0.043705472	Ssc5d
ENSMUSG00000031284	72.12105479	0.92942464	0.381935608	2.433458992	0.014955329	0.043883252	Pak3
ENSMUSG00000030522	445.2417798	0.366688707	0.15070387	2.433173795	0.014967115	0.043906987	Mtmr10
ENSMUSG00000030272	819.6629705	0.799571033	0.3286207	2.433112195	0.014969662	0.043909036	Camk1
ENSMUSG00000070305	1109.978309	0.735019828	0.302178639	2.43240168	0.014999063	0.043978986	Mpzl3
ENSMUSG00000106678	11.71184151	1.129675576	0.464448269	2.432295804	0.015003449	0.043986416	NA
ENSMUSG00000020422	4272.065178	0.74836929	0.307693469	2.432191018	0.01500779	0.043989467	Tns3
ENSMUSG00000022031	1097.966576	0.545717108	0.224378166	2.432131072	0.015010274	0.04399014	Elp3
ENSMUSG00000091845	213.1034384	0.790258088	0.325269257	2.429550506	0.015117558	0.044260872	NA
ENSMUSG00000047592	44.93155854	1.073276625	0.441866666	2.428960382	0.015142187	0.044322054	Nxpe5
ENSMUSG00000058773	10.47177528	1.695609076	0.698249904	2.428369938	0.015166864	0.044372416	Hist1h1b
ENSMUSG00000000562	25.69146302	0.897634597	0.369667347	2.428222576	0.015173028	0.044384985	NA
ENSMUSG00000068697	3.760909218	1.878380447	0.773907795	2.427137264	0.015218497	0.044485737	Myoz1
ENSMUSG00000044948	296.5052559	0.864571422	0.35623796	2.426949173	0.015226389	0.044497244	NA
ENSMUSG00000038544	556.3265411	0.459315528	0.18927134	2.426756881	0.015234461	0.044509883	Inip
ENSMUSG00000041319	358.8744184	0.750853276	0.309602005	2.425220974	0.015299071	0.044682166	Thoc6
ENSMUSG00000047824	1645.124695	0.569192526	0.234717906	2.425006834	0.015308099	0.044703035	Pygo2
ENSMUSG00000070371	53.92924402	1.153566192	0.47571933	2.424888206	0.015313101	0.044706653	Prss36
ENSMUSG00000030400	764.1989645	0.561823348	0.231807205	2.423666456	0.01536471	0.044840793	Erc2
ENSMUSG00000030309	131.6816816	0.57444778	0.237025914	2.423565293	0.01536899	0.044842266	Caprin2
ENSMUSG00000031546	445.5036111	0.479660757	0.197912719	2.423597423	0.015367631	0.044842266	Gins4
ENSMUSG00000030714	458.0343008	0.600935884	0.247968426	2.423437101	0.015374415	0.044852587	Sgf29
ENSMUSG00000106022	15.70536538	1.411120419	0.582310481	2.423312762	0.015379679	0.044862434	NA
ENSMUSG00000096199	256.9611015	0.576557466	0.237955075	2.422967719	0.015394295	0.044894041	Pthrhd1
ENSMUSG00000043419	37.99851513	0.928905254	0.38339572	2.422836784	0.015399844	0.044904712	Chd3os
ENSMUSG00000034681	2799.62284	0.539274732	0.222681967	2.421726098	0.015446988	0.045012313	Rnps1
ENSMUSG00000052794	100.194591	0.828088649	0.341999508	2.421315324	0.015464456	0.045043358	1700030K09Rik

ENSMUSG00000038116	498.1247796	0.512256722	0.211580021	2.421101571	0.015473553	0.045064329	Phf20
ENSMUSG00000022886	3.800864456	2.554719364	1.055254456	2.420951032	0.015479962	0.045077468	Prl2a1
ENSMUSG00000036172	5.571474687	1.805279697	0.746488009	2.418363958	0.015590474	0.045354801	Cd200r3
ENSMUSG00000028622	1262.998552	0.561932926	0.232395768	2.41799982	0.015606085	0.045394655	Mrpl37
ENSMUSG00000068921	1827.787303	0.453324255	0.18751864	2.417489026	0.015628005	0.045447288	Dap3
ENSMUSG00000036466	51.71026026	1.144404606	0.47350863	2.416861137	0.015654988	0.045503475	Megf11
ENSMUSG00000025321	62.14921511	1.055567147	0.436814132	2.416513274	0.015669955	0.045541405	Itgb8
ENSMUSG00000040472	846.3810413	0.583148243	0.241359309	2.416100068	0.015687749	0.045587544	Rabggta
ENSMUSG00000052534	2265.832763	0.575212585	0.238235719	2.414468273	0.015758195	0.045781055	Pbx1
ENSMUSG00000031207	3535.850304	1.157757321	0.479863237	2.412681847	0.015835636	0.045972304	Msn
ENSMUSG00000025934	569.0908134	0.927786756	0.384618124	2.412228388	0.015855346	0.046021449	Gsta3
ENSMUSG00000042793	16.79270904	1.338995279	0.555092225	2.412203266	0.015856439	0.046021449	Lgr6
ENSMUSG00000038685	574.7768462	0.409259144	0.169674956	2.412018567	0.015864474	0.046039144	Rtel1
ENSMUSG00000003809	689.5659452	0.537851763	0.223210813	2.409613387	0.015969433	0.046304144	Gcdh
ENSMUSG00000032518	18486.15892	0.623488942	0.25876809	2.409450645	0.015976557	0.046319146	NA
ENSMUSG00000109277	1.848309546	2.448722318	1.016444446	2.409105905	0.015991657	0.04634227	NA
ENSMUSG00000034361	880.7595642	0.925575929	0.384239429	2.408852032	0.016002785	0.046366892	Cpne2
ENSMUSG00000093910	6.48978634	1.898982428	0.788423196	2.408582646	0.0160146	0.04638981	NA
ENSMUSG00000023991	2716.639117	0.578244305	0.240083369	2.408514629	0.016017584	0.046392799	Foxp4
ENSMUSG00000109946	41.71581	1.250044129	0.519040643	2.408374267	0.016023745	0.046397755	NA
ENSMUSG00000050345	24.92167826	1.392792737	0.578477838	2.407685561	0.016054001	0.04647561	4930486L24Rik
ENSMUSG00000033467	466.8362834	0.546260915	0.226918714	2.407297774	0.01607106	0.046518432	Crlf2
ENSMUSG00000062997	3216.023801	0.568658742	0.236226529	2.407260292	0.01607271	0.046518432	Rpl35
ENSMUSG00000040276	123.3458577	1.074731014	0.446521925	2.40689416	0.016088832	0.046559421	Pacsin1
ENSMUSG00000001517	476.9409888	0.888945076	0.369408226	2.406403038	0.01611048	0.04661639	Foxm1
ENSMUSG00000009566	657.0287536	0.649688248	0.27011538	2.405224933	0.016162514	0.046744179	Fpgs
ENSMUSG00000024041	11.7371454	1.575642441	0.655172468	2.404927737	0.016175664	0.046776515	Cryaa
ENSMUSG00000043716	16745.19443	0.551815025	0.22951239	2.404292973	0.016203781	0.04684642	Rpl7
ENSMUSG00000090258	314.2138547	0.690446814	0.287207287	2.404001727	0.016216697	0.046878054	Churc1
ENSMUSG00000002372	1893.928699	0.515934914	0.214678259	2.403293734	0.01624813	0.04695178	Ranbp3
ENSMUSG00000053550	65.91748003	0.993487769	0.413643355	2.401797966	0.016314716	0.047126994	Shisa7
ENSMUSG000000067855	2.421592193	2.5208933	1.049862317	2.401165618	0.016342938	0.047197038	Speer3
ENSMUSG00000003235	2211.895149	0.716713771	0.298495838	2.401084636	0.016346555	0.047198938	Eif2b5
ENSMUSG00000105852	6.474190374	1.621567807	0.675474268	2.400635943	0.01636661	0.04723669	NA
ENSMUSG00000086290	405.2626883	0.683300803	0.284740679	2.399730192	0.01640716	0.047347971	Snhg12
ENSMUSG00000032409	442.7591205	0.477176595	0.198870356	2.399435518	0.016420372	0.047380341	Atr
ENSMUSG00000054206	17.57443796	0.994539504	0.414518593	2.399263919	0.016428069	0.047394479	Gzmm
ENSMUSG00000108736	6.987484864	1.395447896	0.581621445	2.399237353	0.016429261	0.047394479	NA
ENSMUSG00000012076	233.0475995	0.630266558	0.262736985	2.398849781	0.01644666	0.047433151	Brms1l
ENSMUSG00000103012	7.442686339	1.712782856	0.714172527	2.398276034	0.016472447	0.047495988	NA
ENSMUSG00000068923	527.4587845	1.00919389	0.42081809	2.398171358	0.016477155	0.047503798	Syt11
ENSMUSG000000020121	354.0049303	0.604658035	0.252140725	2.398097468	0.016480479	0.047507616	Srgap1
ENSMUSG00000035595	165.7040124	0.743379474	0.310063984	2.397503461	0.016507225	0.047567399	1600002K03Rik
ENSMUSG00000041781	1220.44484	0.641126152	0.267608848	2.395758425	0.016586018	0.047777127	Cpsf2
ENSMUSG00000030254	220.2545828	0.883907406	0.369041961	2.395140661	0.01661399	0.047846036	Rad18
ENSMUSG00000030921	438.2476594	0.947842501	0.395785444	2.394839213	0.016627655	0.047879585	Trim30a
ENSMUSG00000031536	438.5280528	0.551385183	0.230362107	2.393558514	0.01668582	0.048035425	Polb
ENSMUSG00000000058	315.9238631	0.876952587	0.36648234	2.392891805	0.01671617	0.048105309	Cav2
ENSMUSG00000031652	1510.608002	0.64925935	0.271327834	2.392896227	0.016715968	0.048105309	N4bp1
ENSMUSG00000039873	36.64736215	0.938586159	0.392267527	2.392719494	0.016724022	0.048116247	Neurl2
ENSMUSG00000001228	1096.646931	1.08939782	0.455308958	2.392656241	0.016726905	0.048118715	Uhrf1
ENSMUSG00000093538	1.846461576	2.403615559	1.004618361	2.392565826	0.016731027	0.048124745	NA
ENSMUSG00000043618	297.8649827	0.719845425	0.300919262	2.392154689	0.016749781	0.048172857	NA
ENSMUSG00000021090	5.424769894	1.77409387	0.741661548	2.392053186	0.016754414	0.048180349	Lrrc9
ENSMUSG00000060639	101.7416965	0.858319116	0.358980276	2.390992413	0.0168029	0.048308084	NA
ENSMUSG00000097318	55.71690583	0.830262444	0.34728626	2.39071492	0.016815604	0.048327061	1700007L15Rik
ENSMUSG00000039253	132.4179859	0.92781995	0.388115619	2.390576172	0.016821959	0.048339478	Fn3krp
ENSMUSG00000078974	1108.781579	0.546052707	0.228432058	2.39043815	0.016828283	0.048351802	NA
ENSMUSG00000041974	361.0236487	0.890796048	0.372709939	2.390051764	0.016845998	0.048385145	Spidr
ENSMUSG00000005575	2980.886469	0.441298968	0.184650206	2.389918631	0.016852106	0.048396836	Ube2m
ENSMUSG00000031400	1870.779288	0.478134307	0.200086576	2.389637107	0.016865028	0.048422238	G6pdx
ENSMUSG000000020723	58.39974412	1.276818187	0.534324899	2.389591406	0.016867126	0.048422411	Cacng4
ENSMUSG00000045991	509.1396159	1.979545134	0.828536759	2.389206166	0.016884824	0.048467362	Onecut2
ENSMUSG00000079215	1977.414236	0.472939933	0.197965334	2.389003784	0.016894128	0.048485872	Zfp664
ENSMUSG00000085327	2.566123677	2.262135422	0.947432126	2.387649058	0.016956525	0.048652944	Gm16104
ENSMUSG00000105085	1.930049553	2.64268103	1.106868582	2.387529173	0.016962056	0.048659656	NA
ENSMUSG00000091818	1.976963553	2.420788337	1.014084381	2.387166572	0.016978796	0.048701798	NA

ENSMUSG00000040528	110.8752608	1.003559479	0.420505958	2.386552344	0.017007186	0.048771453	Milr1
ENSMUSG00000033983	187.588971	0.610627041	0.255873383	2.386442206	0.017012281	0.048780175	Coil
ENSMUSG00000029193	15.56955168	1.269342635	0.532237044	2.384919744	0.017082848	0.048935262	Cckar
ENSMUSG00000063179	344.3161733	0.546413765	0.229216569	2.383831884	0.017133427	0.049056491	Pstk
ENSMUSG00000038650	4882.044338	0.426093894	0.178782759	2.383305281	0.017157959	0.04911489	Rnh1
ENSMUSG00000028291	1070.88434	0.5469191	0.229515961	2.382924037	0.017175738	0.049153938	Akirin2
ENSMUSG00000016256	7738.60224	0.567274941	0.238073759	2.382769705	0.01718294	0.049168625	Ctsz
ENSMUSG00000037016	124.3065535	1.24634525	0.523781458	2.37951388	0.01733549	0.049581255	Frem2
ENSMUSG00000035540	5.04557246	2.258522166	0.949549425	2.37851986	0.017382301	0.049697188	Gc
ENSMUSG00000020495	419.6587073	0.468143594	0.196888726	2.377706454	0.017420688	0.049788963	Smg8
ENSMUSG00000034889	853.8366335	0.342429837	0.14404914	2.377173764	0.017445868	0.049848933	Cactin
ENSMUSG00000024999	343.6888951	0.574320711	0.241636789	2.376793339	0.017463869	0.049894369	Noc3l
ENSMUSG00000073179	11.717547	1.478902114	0.622256936	2.376674376	0.017469502	0.04990446	NA
ENSMUSG00000053113	2541.134582	1.036437889	0.436154867	2.37630706	0.017486904	0.04994216	Socs3
ENSMUSG00000054519	102.4275741	0.607001887	0.255473261	2.375989893	0.017501942	0.049979101	Zfp867

Table S6 Downregulated genes in small intestinal tumors from H2B/p53ΔIEC compared to adjacent non-tumor tissue

gene_id	baseMean	log2FoldChange	lfcSE	stat	pvalue	padj	symbol
ENSMUSG0C180.5002249	-3.089995873	0.257954652	-11.97883367	4.58732E-33	2.72441E-30	Rab3c	
ENSMUSG0C543.0337516	-2.615194773	0.22086618	-11.84063023	2.40638E-32	1.27035E-29	Myom1	
ENSMUSG0C153.4776084	-3.259921159	0.279452951	-11.66536675	1.91576E-31	8.58693E-29	Syt1	
ENSMUSG0C2429.711901	-2.189378108	0.193781954	-11.29815272	1.34007E-29	5.39572E-27	Aplp1	
ENSMUSG0C73.44953185	-3.375836109	0.310264318	-10.88051674	1.42751E-27	5.13819E-25	Grik3	
ENSMUSG0C8096.295975	-2.148121643	0.1982173	-10.83720564	2.2937E-27	7.89699E-25	Cd82	
ENSMUSG0C5518.733559	-2.180170408	0.201302169	-10.83033741	2.47243E-27	8.39071E-25	Slc25a22	
ENSMUSG0C5702.518362	-5.164116008	0.480089607	-10.75656698	5.5188E-27	1.74806E-24	Cubn	
ENSMUSG0C2793.993793	-1.6468498	0.153261356	-10.74536883	6.23124E-27	1.92246E-24	Wdtdc1	
ENSMUSG0C7111.79302	-1.821025499	0.170392972	-10.68721017	1.16833E-26	3.42651E-24	Tcn2	
ENSMUSG0C199.2460169	-2.733021766	0.256874799	-10.63950911	1.95155E-26	5.45423E-24	Nsg2	
ENSMUSG0C433.2449766	-5.421732941	0.510771001	-10.61480181	2.54334E-26	6.94477E-24	Fgf15	
ENSMUSG0C394.1101646	-2.311911995	0.22073292	-10.4737979	1.13976E-25	2.94307E-23	Slc22a21	
ENSMUSG0C812.9606835	-3.636127179	0.347398976	-10.46671817	1.22828E-25	3.10414E-23	Hspa12a	
ENSMUSG0C68.61937793	-3.924752783	0.375942362	-10.43977264	1.63201E-25	4.04263E-23	Chrna3	
ENSMUSG0C2263.480988	-1.445766357	0.140341084	-10.30180411	6.9152E-25	1.6763E-22	Tpcn1	
ENSMUSG0C816.2599251	-2.380961164	0.234308383	-10.1616559	2.94039E-24	6.52823E-22	Bend7	
ENSMUSG0C186.6533583	-5.222197326	0.519632272	-10.04979407	9.20596E-24	1.97024E-21	Slc6a18	
ENSMUSG0C823.2871734	-2.095854527	0.208995454	-10.02823022	1.14551E-23	2.38709E-21	Gm7694	
ENSMUSG0C67.61798509	-3.453044655	0.346010824	-9.979585653	1.87247E-23	3.84946E-21	Elavl4	
ENSMUSG0C203.5739771	-3.707401651	0.372100782	-9.96343419	2.20318E-23	4.4734E-21	Foxo6	
ENSMUSG0C3009.645643	-4.648931367	0.467925915	-9.935186791	2.92627E-23	5.84172E-21	Dfna5	
ENSMUSG0C2693.534852	-1.815556694	0.183592263	-9.889069764	4.64322E-23	8.89552E-21	Sox13	
ENSMUSG0C4359.440905	-2.138231722	0.218033918	-9.806876553	1.05174E-22	1.90726E-20	Zbtb7b	
ENSMUSG0C377.940163	-3.409185774	0.349718857	-9.748361304	1.8747E-22	3.32353E-20	Satb2	
ENSMUSG0C314.6705898	-2.592977366	0.268770424	-9.647554696	5.03418E-22	8.36308E-20	Fam189a2	
ENSMUSG0C19409.73451	-2.320407107	0.24171451	-9.599784082	8.01121E-22	1.28591E-19	Myh14	
ENSMUSG0C135.959187	-3.92440062	0.410036101	-9.570866102	1.06014E-21	1.66786E-19	Pln	
ENSMUSG0C193.8683502	-4.092080522	0.427685149	-9.567974328	1.09021E-21	1.70388E-19	NA	
ENSMUSG0C123.5390542	-5.252906079	0.557916451	-9.41521991	4.72093E-21	6.7156E-19	Syt2	
ENSMUSG0C3075.741885	-5.342348866	0.570236144	-9.368660553	7.34588E-21	1.01925E-18	Defa21	
ENSMUSG0C3484.143994	-1.562319717	0.167117685	-9.348619918	8.87988E-21	1.20543E-18	Cgn	
ENSMUSG0C130.7810797	-3.666997266	0.393073335	-9.329041014	1.06833E-20	1.43386E-18	Eef1a2	
ENSMUSG0C873.8222594	-2.19448637	0.235886847	-9.303131574	1.36369E-20	1.79207E-18	Stk10	
ENSMUSG0C82.39048394	-3.118172748	0.335179331	-9.302998315	1.3654E-20	1.79207E-18	Pcsk2	
ENSMUSG0C3707.740524	-1.838119138	0.198909476	-9.24098325	2.44242E-20	3.13634E-18	Hexb	
ENSMUSG0C2139.493736	-1.83682984	0.200033312	-9.182619763	4.20729E-20	5.3164E-18	Cas21	
ENSMUSG0C1839.947191	-1.910692748	0.209633545	-9.114441819	7.90765E-20	9.88706E-18	Erlin1	
ENSMUSG0C6720.190064	-1.716219035	0.188778368	-9.091184826	9.79656E-20	1.20584E-17	2900026A02Rik	
ENSMUSG0C1744.800897	-1.545759215	0.170794457	-9.050406212	1.42437E-19	1.70548E-17	Numb	
ENSMUSG0C189.4447768	-2.534947009	0.280124344	-9.049363473	1.43804E-19	1.70811E-17	Kcnb1	
ENSMUSG0C9408.89695	-1.9142664	0.212448053	-9.010515157	2.05091E-19	2.34237E-17	Eps8l2	
ENSMUSG0C856.2558458	-1.632581936	0.181480882	-8.995889386	2.34327E-19	2.66348E-17	Cables1	
ENSMUSG0C2043.020636	-1.553517985	0.172717399	-8.994565641	2.37168E-19	2.68294E-17	Urgcp	
ENSMUSG0C41.62096678	-3.85660398	0.42988699	-8.971204228	2.9329E-19	3.30208E-17	Lsmp	
ENSMUSG0C245.1519961	-5.066597823	0.565015691	-8.967180743	3.04201E-19	3.40877E-17	Serpina1b	
ENSMUSG0C76.90794077	-2.85440666	0.320523371	-8.905455646	5.31672E-19	5.74109E-17	Mapk8ip2	
ENSMUSG0C53.36781507	-3.407733553	0.38270771	-8.904272018	5.37375E-19	5.77642E-17	Hhatl	
ENSMUSG0C1317.048299	-2.760539817	0.311470998	-8.862911256	7.79516E-19	8.26705E-17	Tesk2	
ENSMUSG0C394.6687312	-4.486055826	0.507482373	-8.839825905	9.58679E-19	1.00328E-16	Gm7861	
ENSMUSG0C808.5229843	-2.739792934	0.310085824	-8.835595562	9.95664E-19	1.03288E-16	Mrv1	
ENSMUSG0C2384.05709	-4.070383585	0.460894557	-8.83148548	1.03295E-18	1.0669E-16	Aspa	
ENSMUSG0C116.9220047	-2.020668492	0.229124991	-8.819066312	1.15418E-18	1.18696E-16	Syn2	
ENSMUSG0C2753.922102	-5.161930319	0.588969077	-8.764348616	1.8786E-18	1.8595E-16	Defa22	
ENSMUSG0C3813.747546	-3.019175221	0.345004795	-8.751110889	2.11263E-18	2.08247E-16	Angptl4	
ENSMUSG0C82.72861424	-5.014545256	0.573103273	-8.74981088	2.13711E-18	2.0979E-16	P2ry4	
ENSMUSG0C1948.443303	-1.523020081	0.174077748	-8.749079618	2.151E-18	2.10284E-16	Elf4	
ENSMUSG0C139.8961343	-4.63067351	0.529487623	-8.745574605	2.21884E-18	2.16027E-16	Baat	
ENSMUSG0C72.19137649	-3.103360586	0.354879603	-8.744826588	2.23358E-18	2.16576E-16	Ryr3	
ENSMUSG0C11109.39952	-2.16575443	0.248226075	-8.7249272	2.66352E-18	2.55139E-16	Nudt4	
ENSMUSG0C20207.17185	-5.823536285	0.667434051	-8.725260982	2.65567E-18	2.55139E-16	Mep1a	
ENSMUSG0C6337.711117	-3.466875975	0.398499244	-8.69983075	3.3238E-18	3.14582E-16	Slc26a2	
ENSMUSG0C7298.982202	-1.753835442	0.202060142	-8.679769401	3.96572E-18	3.6945E-16	Xnpnep1	
ENSMUSG0C483.2228969	-3.139642088	0.361959943	-8.67400427	4.17185E-18	3.86132E-16	Nckap5	
ENSMUSG0C226.4894999	-3.44849136	0.399667134	-8.628408661	6.22115E-18	5.51453E-16	Rdh9	



ACCEPTED MANUSCRIPT						
ENSMUSG0C 3581.325025	-1.528247372	0.177875567	-8.591665505	8.57176E-18	7.40476E-16	C130074G19Rik
ENSMUSG0C 69.85728308	-4.441059037	0.518151628	-8.570964173	1.02622E-17	8.70676E-16	NA
ENSMUSG0C 1002.358959	-2.032266665	0.237640399	-8.551856798	1.21124E-17	1.02036E-15	Plice1
ENSMUSG0C 140.1772409	-3.171742599	0.371234138	-8.543779458	1.29902E-17	1.0866E-15	Dpp10
ENSMUSG0C 4653.999969	-1.76100322	0.206187836	-8.540771634	1.33328E-17	1.10747E-15	Tbx3
ENSMUSG0C 1357.472259	-1.664232605	0.195467854	-8.514098721	1.67891E-17	1.37059E-15	Parp4
ENSMUSG0C 193.180702	-2.12050656	0.249981408	-8.48265709	2.20109E-17	1.77251E-15	Lrrc3
ENSMUSG0C 2687.108597	-1.383516946	0.164453039	-8.41283902	4.00204E-17	3.15855E-15	Ppp2r5d
ENSMUSG0C 55.19182492	-2.753879431	0.327915517	-8.398136975	4.53618E-17	3.55648E-15	Tub
ENSMUSG0C 69.59412456	-3.039031517	0.362185055	-8.390825277	4.82741E-17	3.77237E-15	Stmn3
ENSMUSG0C 4200.954942	-1.982950077	0.236652953	-8.379147832	5.33123E-17	4.12536E-15	Rxra
ENSMUSG0C 26.35911661	-5.345689965	0.638481793	-8.372501806	5.64077E-17	4.35072E-15	Gpr149
ENSMUSG0C 43.04169743	-3.127685233	0.374563778	-8.350207398	6.81432E-17	5.20518E-15	Syt9
ENSMUSG0C 2781.369156	-2.169603861	0.25986939	-8.34882425	6.89458E-17	5.24961E-15	Adap1
ENSMUSG0C 43.49552712	-3.049095434	0.365372599	-8.345167206	7.11132E-17	5.39733E-15	Mapk10
ENSMUSG0C 244.2324872	-2.521770984	0.303349933	-8.313075796	9.32529E-17	6.98838E-15	Rtn1
ENSMUSG0C 87.4445723	-3.129371881	0.381251622	-8.208153614	2.24616E-16	1.62188E-14	Ryr2
ENSMUSG0C 157.7765672	-3.023319057	0.369155131	-8.189833494	2.61588E-16	1.86615E-14	Nos1
ENSMUSG0C 384.2251372	-1.82538145	0.223818845	-8.155620015	3.47393E-16	2.44886E-14	Mfsd8
ENSMUSG0C 116.4506489	-4.835625341	0.593583571	-8.146494575	3.74626E-16	2.63302E-14	Car14
ENSMUSG0C 26.21637935	-4.287537184	0.527090923	-8.134340761	4.14186E-16	2.90248E-14	Rit2
ENSMUSG0C 4984.414183	-1.952483725	0.240281792	-8.125808065	4.44392E-16	3.09589E-14	Chmp4c
ENSMUSG0C 2868.764853	-2.003874275	0.246875614	-8.116938888	4.78089E-16	3.31122E-14	Cdx1
ENSMUSG0C 456.3642425	-2.106157815	0.26042819	-8.087288137	6.10078E-16	4.16466E-14	Nyap1
ENSMUSG0C 52.48076615	-3.821337918	0.473130067	-8.076717553	6.65334E-16	4.51591E-14	NA
ENSMUSG0C 1435.176498	-1.402085646	0.173823506	-8.06614524	7.25525E-16	4.89647E-14	Zfyve1
ENSMUSG0C 3498.062557	-1.869595754	0.233136578	-8.019315418	1.06336E-15	6.92088E-14	Tom1l2
ENSMUSG0C 2379.134902	-2.145895117	0.267883179	-8.010563118	1.14184E-15	7.39118E-14	Pdlim2
ENSMUSG0C 219.2422904	-4.199689742	0.524671242	-8.004421452	1.2003E-15	7.74844E-14	NA
ENSMUSG0C 48093.19093	-5.461511234	0.684103686	-7.983455347	1.42293E-15	9.11134E-14	Naaladl1
ENSMUSG0C 110.1039627	-2.11201459	0.264625788	-7.98113672	1.44992E-15	9.25705E-14	Rai2
ENSMUSG0C 32.03605952	-3.35811878	0.420967987	-7.977135748	1.49768E-15	9.51308E-14	Negr1
ENSMUSG0C 51.3408743	-3.026279744	0.379433692	-7.975780247	1.51421E-15	9.59243E-14	Ppp2r2c
ENSMUSG0C 8586.630589	-1.462669078	0.183647392	-7.964551318	1.65824E-15	1.0394E-13	Ptprf
ENSMUSG0C 138.0322542	-4.103991195	0.51608288	-7.95219403	1.83237E-15	1.14251E-13	NA
ENSMUSG0C 1812.417181	-1.844972076	0.232279326	-7.942902672	1.97504E-15	1.22504E-13	Rap1gap2
ENSMUSG0C 2271.586057	-3.133098344	0.395057055	-7.93074899	2.17828E-15	1.3406E-13	4930539E08Rik
ENSMUSG0C 2053.686951	-1.648534963	0.208430578	-7.909275989	2.5889E-15	1.58103E-13	Dnm1
ENSMUSG0C 19600.67507	-4.074363098	0.515286265	-7.906989524	2.63688E-15	1.6062E-13	Abcb1a
ENSMUSG0C 2430.2872	-1.973200866	0.249893255	-7.896174982	2.87593E-15	1.73402E-13	Brpf3
ENSMUSG0C 35869.57409	-2.535832621	0.321350194	-7.891181233	2.9934E-15	1.79121E-13	Ezr
ENSMUSG0C 6895.442908	-2.149479566	0.272379271	-7.891494668	2.98589E-15	1.79121E-13	Myl9
ENSMUSG0C 1934.008587	-2.167787111	0.274799141	-7.888624056	3.05536E-15	1.8237E-13	Tmem106a
ENSMUSG0C 38.2514843	-6.548753422	0.83453062	-7.847229649	4.25328E-15	2.51972E-13	NA
ENSMUSG0C 687.6915255	-2.803568662	0.357643591	-7.839001543	4.54143E-15	2.67708E-13	Slc22a4
ENSMUSG0C 1477.876442	-2.993776885	0.384099393	-7.794276536	6.47785E-15	3.77176E-13	Plekhhg6
ENSMUSG0C 454.3449282	-2.619526022	0.336390389	-7.787160719	6.85318E-15	3.97083E-13	Slc24a3
ENSMUSG0C 180.633901	-1.834577682	0.235872525	-7.777835441	7.37759E-15	4.2495E-13	Syp
ENSMUSG0C 161.0189675	-2.888979104	0.371571511	-7.775028542	7.54304E-15	4.32832E-13	Nos1ap
ENSMUSG0C 1276.874403	-2.383079646	0.306641005	-7.771562216	7.7524E-15	4.42707E-13	Itih5
ENSMUSG0C 82.17305512	-2.3825553	0.307257809	-7.754254662	8.88638E-15	5.0383E-13	Zfp169
ENSMUSG0C 1905.976988	-3.149405484	0.406172883	-7.753116016	8.96646E-15	5.0716E-13	9130409J20Rik
ENSMUSG0C 8010.539142	-2.249338276	0.2903812	-7.746156686	9.47156E-15	5.30676E-13	Sept5
ENSMUSG0C 217.3651204	-5.829561229	0.753539741	-7.736235939	1.02403E-14	5.71055E-13	1700057G04Rik
ENSMUSG0C 16564.53906	-5.7373541	0.741807971	-7.734284782	1.03986E-14	5.78523E-13	Tmigd1
ENSMUSG0C 4227.220617	-1.613040641	0.208645193	-7.731022315	1.06686E-14	5.92159E-13	Slc39a9
ENSMUSG0C 4450.192359	-2.139986884	0.277316457	-7.716768446	1.19316E-14	6.60717E-13	Trpm4
ENSMUSG0C 2708.872514	-2.079180689	0.269819479	-7.705821289	1.30004E-14	7.14904E-13	Dnmbp
ENSMUSG0C 1032.429873	-3.785716063	0.491304274	-7.705440924	1.30392E-14	7.15381E-13	Nts
ENSMUSG0C 76.71550932	-4.718590959	0.613419068	-7.692279564	1.44536E-14	7.83928E-13	Gm15292
ENSMUSG0C 497.4216972	-3.573880196	0.466561126	-7.660047084	1.85865E-14	1.00123E-12	Ogn
ENSMUSG0C 1901.329235	-2.655138539	0.346648894	-7.659446153	1.86737E-14	1.00365E-12	Slc22a5
ENSMUSG0C 4866.865162	-2.054780072	0.268486997	-7.653182806	1.96065E-14	1.04904E-12	Slc25a37
ENSMUSG0C 1612.027524	-1.632065273	0.213338235	-7.650130188	2.00776E-14	1.07183E-12	Plekhhg2
ENSMUSG0C 5992.608752	-1.538991552	0.202040709	-7.617234944	2.59167E-14	1.36514E-12	Sema4a
ENSMUSG0C 919.437474	-1.790575081	0.235642803	-7.598683509	2.99158E-14	1.56194E-12	Per2
ENSMUSG0C 2716.719281	-1.983998993	0.261248118	-7.594309217	3.09439E-14	1.60503E-12	Arrb1

ENSMUSG0C 21.60517266	-5.039179361	0.663527448	-7.594530383	3.08911E-14	1.60503E-12	Zfp804a
ENSMUSG0C 2525.34376	-1.565621058	0.206284817	-7.589608776	3.20873E-14	1.6571E-12	Efnb1
ENSMUSG0C 46.57920106	-3.413190098	0.450693057	-7.573203194	3.64132E-14	1.86028E-12	Adrb3
ENSMUSG0C 175.0689232	-2.672835653	0.353625812	-7.558372625	4.08143E-14	2.06735E-12	Rab37
ENSMUSG0C 1744.168843	-2.165682944	0.28665431	-7.555033607	4.18752E-14	2.11657E-12	Ppp1r12a
ENSMUSG0C 544.6584068	-2.177935301	0.288375064	-7.552439754	4.27179E-14	2.15001E-12	Rapgef1
ENSMUSG0C 176.7934922	-2.355240189	0.312528893	-7.536071841	4.8434E-14	2.41722E-12	Kcna2
ENSMUSG0C 23.64249653	-3.615781864	0.479895187	-7.534524121	4.90119E-14	2.44094E-12	Jph3
ENSMUSG0C 7649.543117	-4.647791447	0.618197527	-7.51829511	5.54951E-14	2.74655E-12	Xpnpep2
ENSMUSG0C 79.06305248	-3.105863735	0.414471779	-7.493546945	6.70368E-14	3.31087E-12	Slc7a14
ENSMUSG0C 346.9787318	-4.096908081	0.547613014	-7.481392836	7.3539E-14	3.61696E-12	Stum
ENSMUSG0C 1588.676693	-2.083225814	0.278580068	-7.478014589	7.54538E-14	3.69263E-12	Prkc
ENSMUSG0C 3282.810654	-2.111064926	0.28230878	-7.477857853	7.55438E-14	3.69263E-12	Ccng2
ENSMUSG0C 9258.564916	-1.092475829	0.14612813	-7.476150095	7.65315E-14	3.73323E-12	Plxnb2
ENSMUSG0C 504.1828539	-2.35913504	0.315690023	-7.47294772	7.8418E-14	3.80961E-12	Tmem144
ENSMUSG0C 1277.669214	-2.548943953	0.341245904	-7.469522488	8.04864E-14	3.90211E-12	Il22ra1
ENSMUSG0C 1225.518173	-1.840162645	0.246517243	-7.464640687	8.35272E-14	4.03307E-12	Khyn
ENSMUSG0C 72.91821567	-3.0047226	0.402897699	-7.457780492	8.79921E-14	4.24004E-12	Gap43
ENSMUSG0C 5003.881904	-1.97207817	0.264452533	-7.457210373	8.83735E-14	4.2498E-12	Rgs5
ENSMUSG0C 28.97759138	-2.97517447	0.398994012	-7.456689521	8.87234E-14	4.25801E-12	Tmem178b
ENSMUSG0C 518.5484627	-2.328986696	0.313264563	-7.434568003	1.0491E-13	4.97546E-12	Cadps2
ENSMUSG0C 11215.96594	-1.740082402	0.234053691	-7.434543728	1.0493E-13	4.97546E-12	Plec
ENSMUSG0C 56.55600948	-3.263540445	0.439166946	-7.431206906	1.07611E-13	5.09245E-12	Astn1
ENSMUSG0C 7005.45209	-2.383019017	0.320765965	-7.429151711	1.09296E-13	5.15167E-12	Pepd
ENSMUSG0C 93.60664555	-1.944051411	0.261808238	-7.425478365	1.12373E-13	5.28621E-12	Lrrc75b
ENSMUSG0C 2421.10454	-3.462256479	0.466361138	-7.423981543	1.13651E-13	5.32523E-12	NA
ENSMUSG0C 196.8423885	-2.534900335	0.342821786	-7.394221837	1.42239E-13	6.58345E-12	Kcnf1
ENSMUSG0C 47.60678406	-3.160838519	0.427485187	-7.394030512	1.42444E-13	6.58345E-12	Tmem179
ENSMUSG0C 11428.55526	-5.836481244	0.78991662	-7.388730777	1.48237E-13	6.8379E-12	Slc10a2
ENSMUSG0C 1133.544905	-1.360837345	0.184207917	-7.387507362	1.49607E-13	6.88771E-12	Cln8
ENSMUSG0C 928.732181	-1.241924386	0.168399498	-7.37486986	1.64506E-13	7.51538E-12	Krba1
ENSMUSG0C 74.05825619	-3.342491118	0.45398373	-7.362579085	1.8039E-13	8.16258E-12	Bmp8a
ENSMUSG0C 3167.331395	-1.323254944	0.180500694	-7.331024128	2.28401E-13	1.02569E-11	Mfn2
ENSMUSG0C 4793.835837	-1.93779352	0.264413757	-7.328641079	2.32498E-13	1.04212E-11	AA986860
ENSMUSG0C 2602.958516	-2.775921992	0.378798402	-7.328230474	2.33211E-13	1.04335E-11	Dgka
ENSMUSG0C 17500.68485	-2.396395596	0.327630966	-7.314313507	2.58701E-13	1.15088E-11	Cndp2
ENSMUSG0C 5172.234292	-1.488112419	0.204360739	-7.281792133	3.29414E-13	1.45728E-11	Prkcd
ENSMUSG0C 1896.325388	-1.335176166	0.183716827	-7.267576897	3.65993E-13	1.6101E-11	Tdrd7
ENSMUSG0C 37.01496536	-2.756012396	0.379514028	-7.261951328	3.81546E-13	1.67232E-11	Pcdh20
ENSMUSG0C 33410.84606	-2.71588579	0.374090819	-7.259963763	3.87194E-13	1.69396E-11	Crip1
ENSMUSG0C 259.6643237	-3.404128304	0.470495006	-7.235206031	4.64823E-13	2.0077E-11	Asb2
ENSMUSG0C 3476.302325	-2.043553668	0.282670519	-7.229454553	4.84938E-13	2.08699E-11	Klc4
ENSMUSG0C 279.0121128	-2.158164633	0.29858026	-7.228088799	4.89838E-13	2.10427E-11	Pcsk1
ENSMUSG0C 1738.790431	-2.372952776	0.328314211	-7.227688279	4.91285E-13	2.10667E-11	Aim1l
ENSMUSG0C 8698.471714	-2.872952723	0.398117107	-7.216350856	5.34012E-13	2.28576E-11	Ipmk
ENSMUSG0C 2929.262126	-1.443591306	0.200107625	-7.214074442	5.4302E-13	2.31598E-11	Patj
ENSMUSG0C 22.40278656	-4.045471216	0.561121086	-7.209622519	5.61072E-13	2.38441E-11	Fstl5
ENSMUSG0C 35.60308908	-3.753625531	0.520985269	-7.204859247	5.81038E-13	2.46485E-11	NA
ENSMUSG0C 3803.886384	-3.308169789	0.459194895	-7.204282594	5.83502E-13	2.47089E-11	Slc52a3
ENSMUSG0C 140349.2638	-3.567522542	0.495213806	-7.204004607	5.84694E-13	2.47153E-11	Anpep
ENSMUSG0C 4533.319885	-1.157454171	0.160702813	-7.202451198	5.91396E-13	2.49542E-11	Ap2a2
ENSMUSG0C 141.3758069	-2.924567563	0.406743148	-7.190207322	6.4693E-13	2.72008E-11	Kcnp2
ENSMUSG0C 4305.936285	-1.125408782	0.156528285	-7.189810963	6.48811E-13	2.72317E-11	Edem1
ENSMUSG0C 118.2526002	-2.118536806	0.294764539	-7.187217338	6.61251E-13	2.77049E-11	Trpv3
ENSMUSG0C 1375.492714	-1.979598951	0.27547741	-7.186066367	6.66846E-13	2.78411E-11	Atg9a
ENSMUSG0C 90.23048714	-4.280427695	0.59578711	-7.184491951	6.74576E-13	2.81144E-11	Dgkb
ENSMUSG0C 35.77412869	-4.675490477	0.651202342	-7.179781426	6.9823E-13	2.89985E-11	Oprk1
ENSMUSG0C 16.68733794	-4.717890491	0.657293411	-7.177754128	7.08659E-13	2.93803E-11	Htr3b
ENSMUSG0C 46.12141495	-2.119790958	0.295692413	-7.168905468	7.55997E-13	3.12339E-11	Dgkg
ENSMUSG0C 69.91994508	-2.7655671	0.386001799	-7.164648215	7.79866E-13	3.2164E-11	Zcchc12
ENSMUSG0C 1196.020331	-3.620944094	0.506243495	-7.152574071	8.51655E-13	3.48826E-11	Sgk2
ENSMUSG0C 73.17806297	-3.707486651	0.518961881	-7.144044267	9.06242E-13	3.69274E-11	Phox2b
ENSMUSG0C 657.5080491	-2.499134019	0.349862139	-7.143196531	9.11851E-13	3.69658E-11	Nr3c2
ENSMUSG0C 18548.36067	-4.743282947	0.664533539	-7.13776306	9.4862E-13	3.83255E-11	Clca1
ENSMUSG0C 34.94730121	-3.359960741	0.471476276	-7.12646831	1.02977E-12	4.13929E-11	Cdh19
ENSMUSG0C 257.3196513	-2.292883754	0.321931841	-7.122264598	1.06168E-12	4.246E-11	Disp2
ENSMUSG0C 28.51311682	-3.243893183	0.455595228	-7.120121076	1.07832E-12	4.29809E-11	Myl1

ENSMUSG0C 24285.67085	-2.740819901	0.385361826	-7.11232851	1.14101E-12	4.51765E-11	Slc9a3r1
ENSMUSG0C 47.9155757	-3.150177167	0.443477764	-7.103348632	1.2177E-12	4.80525E-11	Arhgap20
ENSMUSG0C 2145.014692	-0.808793553	0.113936281	-7.098647967	1.25983E-12	4.96328E-11	Mxi1
ENSMUSG0C 694.1622984	-2.01334989	0.28383059	-7.093491551	1.3077E-12	5.14333E-11	Prkce
ENSMUSG0C 1869.616158	-1.26283327	0.178184588	-7.087219417	1.36833E-12	5.37291E-11	Smtn
ENSMUSG0C 50.36730973	-2.419420173	0.342014845	-7.074020926	1.50508E-12	5.87103E-11	Galr2
ENSMUSG0C 830.6651399	-1.230100495	0.174022199	-7.068641234	1.56458E-12	6.08317E-11	Mtf1
ENSMUSG0C 160.8887808	-5.527420326	0.782003621	-7.068279712	1.56866E-12	6.08907E-11	Myot
ENSMUSG0C 25.56998906	-3.535142018	0.501864604	-7.044015436	1.86777E-12	7.15659E-11	Asic2
ENSMUSG0C 29.49466526	-2.898611184	0.411494611	-7.044104856	1.86658E-12	7.15659E-11	Cplx1
ENSMUSG0C 592.1149255	-3.578164086	0.508090219	-7.04237939	1.88984E-12	7.22949E-11	Slc25a34
ENSMUSG0C 188.5987606	-1.959644283	0.278330312	-7.040714574	1.91256E-12	7.30464E-11	Ybx2
ENSMUSG0C 38.43288336	-3.283117658	0.46774739	-7.018997274	2.23466E-12	8.43984E-11	Slc10a4
ENSMUSG0C 53.12960066	-3.497999117	0.498572167	-7.016033686	2.28255E-12	8.60703E-11	Crtac1
ENSMUSG0C 21.86109051	-3.413549022	0.487118528	-7.007635359	2.42379E-12	9.09631E-11	Lonrf2
ENSMUSG0C 18.69174413	-4.823202437	0.688841854	-7.001900955	2.52513E-12	9.4397E-11	Slitrk3
ENSMUSG0C 3929.200717	-1.055712666	0.150777644	-7.001785135	2.52721E-12	9.4397E-11	Cmtm4
ENSMUSG0C 122.0682165	-2.116874532	0.303190328	-6.981998885	2.91009E-12	1.07851E-10	Tnfrsf14
ENSMUSG0C 2247.864864	-3.505814377	0.502702152	-6.97393947	3.08187E-12	1.13685E-10	Amn
ENSMUSG0C 718.0869265	-4.182626233	0.599844974	-6.972845343	3.10594E-12	1.14395E-10	Pyg
ENSMUSG0C 98.09764064	-3.735152515	0.535979845	-6.968830178	3.19587E-12	1.17343E-10	Vat1l
ENSMUSG0C 140.3140043	-2.091100297	0.300743637	-6.953099058	3.57348E-12	1.30202E-10	Tmem25
ENSMUSG0C 60.18607633	-2.796615448	0.402246426	-6.952492973	3.58887E-12	1.30562E-10	Cacna2d2
ENSMUSG0C 1757.881823	-1.239857454	0.178506009	-6.945746313	3.76465E-12	1.36748E-10	Ctdspl
ENSMUSG0C 35.16703508	-3.298563273	0.474946677	-6.945123383	3.7813E-12	1.37143E-10	Slc18a3
ENSMUSG0C 6106.34444	-1.696332499	0.244320531	-6.943061604	3.83692E-12	1.38948E-10	Dgkd
ENSMUSG0C 1056.317764	-1.681511382	0.24240244	-6.936858307	4.00916E-12	1.44744E-10	Tango2
ENSMUSG0C 427.5273936	-3.041568678	0.438623636	-6.934347424	4.08101E-12	1.47114E-10	Gprn3
ENSMUSG0C 6519.65607	-2.233797289	0.322208188	-6.932776287	4.12661E-12	1.48533E-10	Cobl
ENSMUSG0C 211.3165492	-5.136950365	0.741882568	-6.924209557	4.38417E-12	1.57418E-10	NA
ENSMUSG0C 11988.25508	-1.795172895	0.25931214	-6.922826256	4.42721E-12	1.58632E-10	Acta2
ENSMUSG0C 3229.009654	-2.067892014	0.298839784	-6.91973468	4.5249E-12	1.61888E-10	Espn
ENSMUSG0C 3510.149847	-1.247956663	0.180392139	-6.918021327	4.57995E-12	1.63611E-10	Psen1
ENSMUSG0C 117.2022051	-2.526308144	0.365670887	-6.90869367	4.89137E-12	1.74212E-10	Smim5
ENSMUSG0C 1777.707175	-1.183514893	0.171385112	-6.905587536	4.99961E-12	1.778E-10	Parp12
ENSMUSG0C 36.04152113	-5.584124999	0.809174926	-6.901010914	5.16338E-12	1.82532E-10	NA
ENSMUSG0C 507.9512682	-2.439400691	0.353542431	-6.899880963	5.20461E-12	1.83716E-10	Pstpip2
ENSMUSG0C 33.92867661	-2.502826502	0.363171856	-6.891576151	5.51776E-12	1.93905E-10	Gdap1
ENSMUSG0C 6255.60221	-3.095405864	0.450000083	-6.878678425	6.04104E-12	2.11668E-10	Adamdec1
ENSMUSG0C 409.8197286	-2.779292979	0.404418886	-6.872312541	6.31694E-12	2.20684E-10	Fam78a
ENSMUSG0C 1138.964464	-2.714120905	0.395513716	-6.86226747	6.7776E-12	2.36083E-10	Usp2
ENSMUSG0C 47.65039084	-2.54710056	0.371312596	-6.859720314	6.89955E-12	2.39979E-10	Kcnq2
ENSMUSG0C 1998.451553	-1.924142815	0.280712374	-6.854499465	7.15626E-12	2.48544E-10	Dok4
ENSMUSG0C 45.03006335	-2.322376792	0.339583116	-6.838905354	7.98006E-12	2.75144E-10	Snap91
ENSMUSG0C 1799.593585	-1.40022935	0.204827586	-6.836136569	8.13574E-12	2.80105E-10	Gtf2b
ENSMUSG0C 106.4539156	-2.73007382	0.399657753	-6.831029301	8.43075E-12	2.89842E-10	Calb2
ENSMUSG0C 9203.308529	-5.204039398	0.762021173	-6.82925827	8.53548E-12	2.93019E-10	Cyp2c55
ENSMUSG0C 38.07686506	-3.570221154	0.523333666	-6.822074299	8.97352E-12	3.07169E-10	Ano2
ENSMUSG0C 59.32462305	-3.771031415	0.553033564	-6.818811123	9.1797E-12	3.13323E-10	Gm16793
ENSMUSG0C 110.2624131	-3.555635789	0.52150182	-6.81806976	9.22718E-12	3.14492E-10	NA
ENSMUSG0C 2702.82708	-0.989921608	0.145265512	-6.814567282	9.45479E-12	3.21788E-10	Kif1b
ENSMUSG0C 35.75551667	-2.547405447	0.374569888	-6.800881559	1.03981E-11	3.50379E-10	Necab1
ENSMUSG0C 1685.178695	-1.921899399	0.282704555	-6.79826118	1.05889E-11	3.56304E-10	Fbxo25
ENSMUSG0C 510.3419677	-3.157973324	0.464659492	-6.796317258	1.07327E-11	3.59615E-10	Sorbs1
ENSMUSG0C 3926.415639	-1.828515555	0.269154774	-6.793546813	1.0941E-11	3.65561E-10	Luzp1
ENSMUSG0C 158.0369185	-2.84434843	0.418982507	-6.788704504	1.13145E-11	3.7751E-10	Kcnk3
ENSMUSG0C 382.265621	-1.636835374	0.241215036	-6.785793307	1.1545E-11	3.84662E-10	Tmc8
ENSMUSG0C 7697.333228	-1.996792724	0.294311958	-6.784612962	1.16398E-11	3.87276E-10	Gls
ENSMUSG0C 259.3790382	-2.245906213	0.33163683	-6.772185755	1.26851E-11	4.20289E-10	Prph
ENSMUSG0C 3691.071954	-0.950090297	0.140534773	-6.760535331	1.37483E-11	4.52988E-10	Ube2q1
ENSMUSG0C 1428.932275	-1.817170246	0.269130488	-6.752004438	1.45816E-11	4.77795E-10	Magi3
ENSMUSG0C 5254.909621	-1.220887345	0.180867253	-6.750184576	1.47657E-11	4.82496E-10	Myo18a
ENSMUSG0C 5732.765845	-3.059269413	0.455477754	-6.716616526	1.85993E-11	5.96281E-10	Pde9a
ENSMUSG0C 171.950001	-2.847131452	0.424344392	-6.709482922	1.95315E-11	6.24483E-10	Kif5a
ENSMUSG0C 70.68762877	-2.502376609	0.373175779	-6.705624403	2.00547E-11	6.40349E-10	NA
ENSMUSG0C 28.21275752	-2.47128453	0.368634635	-6.703885888	2.02949E-11	6.47148E-10	Cacna2d3
ENSMUSG0C 57.55714409	-3.263047778	0.486922545	-6.701369271	2.06476E-11	6.57511E-10	Dusp26

ENSMUSG0C 8390.207655	-2.72605846	0.40717228	-6.695098354	2.15527E-11	6.82673E-10	Myk
ENSMUSG0C 4803.735964	-1.984133572	0.296570493	-6.690259535	2.22775E-11	7.04693E-10	4833439L19Rik
ENSMUSG0C 1866.094584	-3.835540258	0.573324854	-6.689994742	2.23179E-11	7.05031E-10	Tmem117
ENSMUSG0C 248.9094846	-1.449793329	0.216772115	-6.688098815	2.26088E-11	7.12329E-10	Ago4
ENSMUSG0C 41.25431445	-2.741865115	0.4107824	-6.674738539	2.47673E-11	7.75195E-10	Ctnna2
ENSMUSG0C 207.8771696	-2.097364806	0.314470601	-6.669509962	2.56659E-11	8.01208E-10	Ppp1r14a
ENSMUSG0C 15445.64065	-2.265714622	0.339734805	-6.669068314	2.57432E-11	8.02568E-10	Hnf4a
ENSMUSG0C 2218.650212	-0.979727942	0.146933205	-6.667845745	2.59585E-11	8.08219E-10	Tet3
ENSMUSG0C 24.92609724	-2.688153163	0.403407709	-6.663613766	2.67175E-11	8.30761E-10	A730017C20Rik
ENSMUSG0C 1959.854054	-1.369045503	0.205513342	-6.66158941	2.70882E-11	8.40088E-10	Thra
ENSMUSG0C 44.1242465	-2.307085462	0.346509859	-6.658065867	2.77454E-11	8.57114E-10	NA
ENSMUSG0C 521.3398984	-1.147765556	0.172512564	-6.653228774	2.86732E-11	8.82332E-10	Tbc1d8
ENSMUSG0C 2739.68944	-0.763105021	0.114757188	-6.64973614	2.93619E-11	9.00027E-10	Ppp2r5a
ENSMUSG0C 28.80391854	-2.957700714	0.445259298	-6.642647847	3.08097E-11	9.41977E-10	Unc80
ENSMUSG0C 2754.510202	-3.583958442	0.539836732	-6.638967363	3.15888E-11	9.64556E-10	Slc1a1
ENSMUSG0C 98.67451649	-2.421765059	0.365022914	-6.634556255	3.2548E-11	9.92568E-10	Rab3b
ENSMUSG0C 3882.062974	-1.856807713	0.279949818	-6.63264482	3.29725E-11	1.00294E-09	Tns1
ENSMUSG0C 1548.801516	-1.128326367	0.170139436	-6.631774482	3.31675E-11	1.00758E-09	Insig2
ENSMUSG0C 3070.309087	-1.264283303	0.190717875	-6.629076087	3.37794E-11	1.02486E-09	Slc35f5
ENSMUSG0C 74.26016864	-2.672736933	0.403198902	-6.628829892	3.38358E-11	1.02526E-09	NA
ENSMUSG0C 1319.103729	-1.950358292	0.294457283	-6.623569548	3.50627E-11	1.05973E-09	Sgms2
ENSMUSG0C 353.2828904	-3.006076388	0.454445862	-6.614817383	3.72011E-11	1.11867E-09	Plin4
ENSMUSG0C 965.1217198	-3.229787231	0.488584164	-6.610503302	3.83016E-11	1.14885E-09	Trpm6
ENSMUSG0C 21.91190005	-2.98568493	0.451784897	-6.608642636	3.8786E-11	1.16192E-09	Scn11a
ENSMUSG0C 3577.199578	-0.848906604	0.128733072	-6.594316389	4.2722E-11	1.27181E-09	Dctn1
ENSMUSG0C 282.518342	-3.652157495	0.554337794	-6.588324905	4.44816E-11	1.32254E-09	NA
ENSMUSG0C 19749.14641	-2.765230112	0.420833355	-6.570843497	5.0031E-11	1.48012E-09	St3gal4
ENSMUSG0C 1108.067151	-2.308062496	0.351882645	-6.559182531	5.41035E-11	1.59663E-09	Slc46a3
ENSMUSG0C 8462.615274	-2.059075536	0.314049274	-6.556536523	5.50718E-11	1.62318E-09	Myo7b
ENSMUSG0C 2210.478507	-1.631543075	0.249358194	-6.542969578	6.03091E-11	1.76847E-09	Dlg3
ENSMUSG0C 5032.509083	-1.192720608	0.182294838	-6.54281067	6.03732E-11	1.76847E-09	Mkrm1
ENSMUSG0C 9673.966795	-1.617124363	0.247453437	-6.535065262	6.35818E-11	1.85787E-09	C77080
ENSMUSG0C 16.84500035	-4.211972647	0.645876653	-6.521326675	6.96882E-11	2.02633E-09	Plppr5
ENSMUSG0C 901.4143943	-2.235732477	0.343307442	-6.512333266	7.39923E-11	2.14885E-09	Npas2
ENSMUSG0C 3938.733926	-1.537746694	0.236303518	-6.50750655	7.64084E-11	2.21361E-09	Shroom3
ENSMUSG0C 119.2745805	-3.315496839	0.509640134	-6.50556465	7.74021E-11	2.23694E-09	Frmd3
ENSMUSG0C 1446.877281	-2.205605424	0.339127762	-6.503759553	7.83371E-11	2.26121E-09	Ihh
ENSMUSG0C 2398.434598	-1.586318987	0.244087584	-6.498974516	8.08694E-11	2.33147E-09	Mpp5
ENSMUSG0C 24.91523503	-2.698113654	0.415418159	-6.494934313	8.30696E-11	2.38334E-09	Esrrb
ENSMUSG0C 53.4027662	-3.420646746	0.526654668	-6.495046852	8.30076E-11	2.38334E-09	Slc5a7
ENSMUSG0C 32.09227249	-2.635662333	0.405855587	-6.494089081	8.35373E-11	2.39386E-09	B430010I23Rik
ENSMUSG0C 1437.653664	-2.031531834	0.313090751	-6.488635738	8.66171E-11	2.47614E-09	Kalrn
ENSMUSG0C 414.8345854	-2.843887582	0.43836822	-6.487440131	8.7307E-11	2.49287E-09	Acer1
ENSMUSG0C 22.02292043	-3.318304267	0.511907756	-6.482230881	9.03762E-11	2.57431E-09	Tacr2
ENSMUSG0C 2920.110069	-3.190303111	0.493203451	-6.468533632	9.89585E-11	2.80198E-09	Nr1h4
ENSMUSG0C 1898.958111	-1.106111108	0.171205132	-6.460735682	1.04195E-10	2.94323E-09	Wipf2
ENSMUSG0C 694.6013824	-3.233432831	0.50057203	-6.45947564	1.05066E-10	2.96432E-09	Mfsd7c
ENSMUSG0C 132.1976319	-3.948808083	0.611901922	-6.453334986	1.09415E-10	3.06879E-09	Defa26
ENSMUSG0C 528.0510343	-2.394059424	0.371089353	-6.451436572	1.10795E-10	3.10382E-09	Arl4d
ENSMUSG0C 9773.893645	-2.516482741	0.39026256	-6.44817874	1.13202E-10	3.1638E-09	Klf4
ENSMUSG0C 1919.906097	-2.359776306	0.366345417	-6.441397104	1.18379E-10	3.29684E-09	Ppp1r12b
ENSMUSG0C 8660.985432	-2.448291929	0.380223545	-6.439085539	1.20195E-10	3.33961E-09	Slc43a2
ENSMUSG0C 99.98731756	-2.287093795	0.355250095	-6.437982221	1.21072E-10	3.36004E-09	Scg3
ENSMUSG0C 5057.820536	-1.540575139	0.239393665	-6.435321256	1.23212E-10	3.41544E-09	Aldh3a2
ENSMUSG0C 21.02219303	-2.981040694	0.463266405	-6.434830282	1.23611E-10	3.42251E-09	Sv2b
ENSMUSG0C 4563.435369	-3.077486765	0.478917817	-6.425918302	1.31076E-10	3.61041E-09	Tfcp2l1
ENSMUSG0C 867.6447183	-1.801046209	0.280298959	-6.425447375	1.31482E-10	3.61097E-09	Hspa2
ENSMUSG0C 2887.003198	-2.051069912	0.319671726	-6.416175558	1.3974E-10	3.82451E-09	Ocln
ENSMUSG0C 45.68075699	-2.864669346	0.446533455	-6.415352122	1.40498E-10	3.84081E-09	NA
ENSMUSG0C 88.76544745	-4.864410192	0.75836759	-6.414317092	1.41456E-10	3.86255E-09	Muc16
ENSMUSG0C 84.28396936	-4.989039063	0.778200763	-6.41033326	1.45202E-10	3.96029E-09	Cyp3a44
ENSMUSG0C 54.23433088	-2.281501379	0.356194567	-6.405211059	1.50162E-10	4.08618E-09	Cntnap2
ENSMUSG0C 602.3634836	-1.02589439	0.160306289	-6.399589174	1.55796E-10	4.22498E-09	Gltscr1
ENSMUSG0C 534.3390913	-1.567877637	0.245074929	-6.397543993	1.57896E-10	4.27218E-09	Klhl23
ENSMUSG0C 2442.821367	-2.610072888	0.408919215	-6.382857028	1.73814E-10	4.68687E-09	Naip5
ENSMUSG0C 1475.904132	-1.182984513	0.185449874	-6.378998745	1.78249E-10	4.80101E-09	Irf2
ENSMUSG0C 1159.499353	-2.594500706	0.407661072	-6.364357262	1.96109E-10	5.25228E-09	Plcd1



ENSMUSG0C 1250.510519	-1.592463658	0.2502601	-6.363234313	1.97549E-10	5.28488E-09	Plekha8
ENSMUSG0C 41.38456129	-4.21344591	0.662618498	-6.358780993	2.03361E-10	5.42205E-09	Gm14085
ENSMUSG0C 72.45569634	-3.016256332	0.474460676	-6.357231446	2.05422E-10	5.47087E-09	Scube2
ENSMUSG0C 4612.077929	-1.452619197	0.228511091	-6.356887069	2.05883E-10	5.477E-09	Zmiz1
ENSMUSG0C 127.1405746	-2.659013089	0.418401826	-6.355166071	2.08202E-10	5.53248E-09	Slc8a1
ENSMUSG0C 1827.388315	-1.383940498	0.217989357	-6.348660859	2.17197E-10	5.75864E-09	Camta2
ENSMUSG0C 105.618031	-3.496673471	0.551133735	-6.344509957	2.23135E-10	5.90946E-09	Grin2a
ENSMUSG0C 2195.04071	-1.99663025	0.314816181	-6.342209741	2.26493E-10	5.99171E-09	Pde5a
ENSMUSG0C 1338.295806	-1.382473145	0.218077894	-6.339354793	2.30729E-10	6.09023E-09	Gatsl2
ENSMUSG0C 811.9995666	-0.877969221	0.138547474	-6.336955809	2.34349E-10	6.16523E-09	Zfand2b
ENSMUSG0C 922.1764807	-1.654378913	0.261477359	-6.327044596	2.49901E-10	6.54537E-09	Cnst
ENSMUSG0C 3228.555306	-1.432192914	0.226369041	-6.326805595	2.50288E-10	6.54829E-09	Add3
ENSMUSG0C 2748.565919	-1.567398166	0.247783814	-6.325668099	2.52139E-10	6.58946E-09	Rhou
ENSMUSG0C 1481.260607	-2.223638132	0.351559859	-6.32506264	2.5313E-10	6.60808E-09	Sesn1
ENSMUSG0C 723.754552	-2.889269311	0.457471953	-6.315729946	2.68889E-10	6.98877E-09	Hmcn2
ENSMUSG0C 1652.004231	-3.23566056	0.512660089	-6.311512495	2.76321E-10	7.16626E-09	Rnf152
ENSMUSG0C 1687.035974	-3.734093531	0.591948015	-6.308144361	2.82401E-10	7.31593E-09	Pgm5
ENSMUSG0C 14870.60455	-2.608771655	0.41373583	-6.305404241	2.87443E-10	7.43844E-09	Rfk
ENSMUSG0C 559.1779465	-1.230513358	0.195332277	-6.299590508	2.98433E-10	7.68101E-09	Ppp6r2
ENSMUSG0C 10355.47787	-2.093960028	0.332431953	-6.298913239	2.9974E-10	7.70629E-09	Plcb3
ENSMUSG0C 2760.913681	-1.242009692	0.19719437	-6.298403392	3.00727E-10	7.72332E-09	Itch
ENSMUSG0C 1431.872904	-1.684205874	0.267847225	-6.287934756	3.21717E-10	8.24456E-09	Ticam1
ENSMUSG0C 160.1234992	-4.643153803	0.739022205	-6.282833958	3.32456E-10	8.47406E-09	Slc17a8
ENSMUSG0C 20.75105571	-3.167777957	0.504466923	-6.279456219	3.39759E-10	8.65093E-09	Kcnt2
ENSMUSG0C 2266.637555	-2.326861839	0.370666804	-6.277502639	3.44054E-10	8.75092E-09	Dgkq
ENSMUSG0C 1411.887511	-1.655327123	0.263831493	-6.274183207	3.51474E-10	8.93008E-09	Zfyve21
ENSMUSG0C 9426.622587	-1.561701408	0.249054139	-6.270529837	3.59822E-10	9.1145E-09	Spint1
ENSMUSG0C 152.7767803	-3.535846138	0.563885583	-6.270502821	3.59884E-10	9.1145E-09	Ckm
ENSMUSG0C 4002.100941	-2.040328745	0.325373515	-6.270727789	3.59364E-10	9.1145E-09	Zzef1
ENSMUSG0C 791.464838	-3.248280203	0.518039372	-6.270334611	3.60273E-10	9.11464E-09	Ppfia3
ENSMUSG0C 3321.767929	-2.619125861	0.417729121	-6.26991447	3.61246E-10	9.12954E-09	B4galnt2
ENSMUSG0C 632.3790196	-1.535660581	0.24501469	-6.267626574	3.66593E-10	9.25481E-09	Cnksr3
ENSMUSG0C 15.09794686	-3.74959955	0.598643152	-6.263496938	3.76439E-10	9.45314E-09	Dbh
ENSMUSG0C 858.3576465	-2.036431134	0.325170544	-6.262655627	3.78476E-10	9.49427E-09	L1cam
ENSMUSG0C 3552.479907	-1.38582336	0.2213347	-6.261211468	3.81998E-10	9.55236E-09	Gltp
ENSMUSG0C 6611.597561	-1.114901128	0.178088241	-6.260385965	3.84026E-10	9.5829E-09	Dnm2
ENSMUSG0C 1435.165676	-1.095605292	0.175229246	-6.25241116	4.04164E-10	1.00537E-08	Coro7
ENSMUSG0C 2497.620747	-1.979678797	0.316965422	-6.245724801	4.21839E-10	1.04715E-08	Tep1
ENSMUSG0C 833.038509	-1.973688383	0.316060719	-6.244649415	4.24752E-10	1.05328E-08	Mier3
ENSMUSG0C 1978.695845	-1.006932733	0.161292272	-6.242907494	4.29511E-10	1.06286E-08	Cdc42bpg
ENSMUSG0C 18.80707937	-3.981426288	0.637920267	-6.241260066	4.3406E-10	1.07097E-08	Clca4c-ps
ENSMUSG0C 772.5294334	-4.059436421	0.650729279	-6.23828764	4.42387E-10	1.08905E-08	Ocm
ENSMUSG0C 16293.76249	-1.342764	0.215264202	-6.237748723	4.43913E-10	1.09154E-08	Lasp1
ENSMUSG0C 1925.567374	-1.91010474	0.306367522	-6.234684163	4.5269E-10	1.10982E-08	Slc22a23
ENSMUSG0C 174.7297738	-2.098515102	0.336824079	-6.230300128	4.65542E-10	1.1378E-08	Cap2
ENSMUSG0C 2860.824546	-3.80176025	0.610797584	-6.22425555	4.83848E-10	1.18011E-08	Slc5a8
ENSMUSG0C 9154.538815	-3.969775811	0.637983292	-6.222382088	4.89663E-10	1.19307E-08	Slc34a2
ENSMUSG0C 207.2224701	-5.123957837	0.824073284	-6.217842435	5.04037E-10	1.22558E-08	Defb37
ENSMUSG0C 16002.38745	-4.463115811	0.718178682	-6.214492194	5.14909E-10	1.25073E-08	Slc51a
ENSMUSG0C 7158.907728	-1.733374452	0.278959263	-6.21371892	5.17451E-10	1.25434E-08	Ifngr1
ENSMUSG0C 40.25114282	-5.671966135	0.913445681	-6.209418086	5.31812E-10	1.28522E-08	Hao2
ENSMUSG0C 3926.432541	-1.3900802	0.223907369	-6.208282498	5.35668E-10	1.29322E-08	Specc1l
ENSMUSG0C 147.1570644	-3.052449231	0.491766718	-6.207108201	5.39684E-10	1.30028E-08	Acvr1c
ENSMUSG0C 960.1380522	-1.028939108	0.165872206	-6.203203868	5.53251E-10	1.33161E-08	Lrp4
ENSMUSG0C 3876.417322	-1.00034204	0.161484219	-6.194673667	5.84059E-10	1.40009E-08	Mark2
ENSMUSG0C 2640.477344	-1.561687015	0.252404431	-6.187240889	6.12264E-10	1.46622E-08	Slc25a20
ENSMUSG0C 595.1906925	-1.195351787	0.193402896	-6.180630231	6.38462E-10	1.52701E-08	Marveld2
ENSMUSG0C 10.22584377	-5.608597989	0.907564899	-6.179831321	6.41701E-10	1.53055E-08	Pcdhac2
ENSMUSG0C 1276.343933	-4.025408864	0.651869333	-6.175177536	6.60892E-10	1.57001E-08	Defa29
ENSMUSG0C 48081.39283	-2.004675169	0.324905146	-6.170032071	6.82761E-10	1.6139E-08	ND5
ENSMUSG0C 6274.891584	-1.096439269	0.177782576	-6.167304433	6.94639E-10	1.63871E-08	Dlst
ENSMUSG0C 1778.491177	-1.067040225	0.173034015	-6.166650083	6.97519E-10	1.64387E-08	Arhgef11
ENSMUSG0C 199.3529031	-2.940901457	0.477172462	-6.163183522	7.12968E-10	1.67364E-08	Abi3bp
ENSMUSG0C 3513.746975	-1.098108558	0.178211546	-6.161826128	7.19108E-10	1.68532E-08	Golga4
ENSMUSG0C 256.0240036	-3.414910929	0.554209396	-6.161770178	7.19362E-10	1.68532E-08	Ttc36
ENSMUSG0C 12788.10337	-1.995693869	0.323941072	-6.160669455	7.24381E-10	1.69541E-08	Dhcr24
ENSMUSG0C 1060.919682	-1.962660925	0.318682759	-6.158666793	7.33599E-10	1.71529E-08	Lrp12



ENSMUSG0C 108.4839526	-2.756549485	0.447607257	-6.158411063	7.34784E-10	1.71638E-08	Wscd2
ENSMUSG0C 96.64579433	-2.387410416	0.387872074	-6.155149017	7.50069E-10	1.74864E-08	Pde4c
ENSMUSG0C 48.85696937	-2.547482452	0.413911649	-6.154652711	7.52422E-10	1.75241E-08	Angptl1
ENSMUSG0C 2388.739026	-2.155586033	0.350554248	-6.149079768	7.79338E-10	1.80977E-08	Styk1
ENSMUSG0C 816.7051759	-1.645625222	0.267608478	-6.149376274	7.77882E-10	1.80977E-08	Grtp1
ENSMUSG0C 6401.540783	-1.122778162	0.182745872	-6.143931725	8.05035E-10	1.86762E-08	Stk25
ENSMUSG0C 5420.810339	-2.871315681	0.467392315	-6.143266772	8.08413E-10	1.87363E-08	Maf
ENSMUSG0C 1591.930272	-2.419312496	0.393950181	-6.141163564	8.19192E-10	1.89491E-08	Ttc22
ENSMUSG0C 804.2956859	-1.5612285	0.254365957	-6.137725813	8.37112E-10	1.9326E-08	Srr
ENSMUSG0C 66.77840937	-1.632369496	0.266017576	-6.136321965	8.44539E-10	1.94785E-08	NA
ENSMUSG0C 60.72118249	-2.612822816	0.425817227	-6.136019513	8.46148E-10	1.94897E-08	Celf6
ENSMUSG0C 657.6466802	-3.903405832	0.636156282	-6.135922795	8.46663E-10	1.94897E-08	Nlrp9b
ENSMUSG0C 181.5382101	-2.5704041	0.419622463	-6.125515976	9.03902E-10	2.06671E-08	Popdc2
ENSMUSG0C 3356.184495	-1.675411576	0.273906264	-6.116733342	9.5513E-10	2.17546E-08	Akap9
ENSMUSG0C 31.8181815	-2.454254722	0.401395456	-6.114306196	9.69779E-10	2.2046E-08	NA
ENSMUSG0C 5716.229432	-2.220247271	0.363216749	-6.112733727	9.79387E-10	2.22431E-08	Ssfa2
ENSMUSG0C 1515.569377	-1.078279404	0.176418506	-6.112053811	9.8357E-10	2.23168E-08	Vps41
ENSMUSG0C 19287.5078	-2.071422349	0.338975578	-6.110830649	9.91139E-10	2.24457E-08	NA
ENSMUSG0C 26705.23541	-3.157565645	0.516864859	-6.10907395	1.00211E-09	2.26725E-08	Myo15b
ENSMUSG0C 2041.554701	-1.027756414	0.168248219	-6.108572329	1.00526E-09	2.27222E-08	Vps13d
ENSMUSG0C 1554.683185	-2.191651906	0.358983504	-6.105160493	1.02697E-09	2.31909E-08	Philp2
ENSMUSG0C 4138.84885	-0.987813959	0.161825523	-6.104191361	1.03322E-09	2.33099E-08	Ppp6r1
ENSMUSG0C 38.9105434	-2.572465047	0.421759236	-6.099368614	1.06488E-09	2.39785E-08	Kcnb2
ENSMUSG0C 2200.707838	-2.26942031	0.372237941	-6.096692625	1.08285E-09	2.43141E-08	Slc52a2
ENSMUSG0C 616.0088661	-2.376225851	0.389914759	-6.094218792	1.09973E-09	2.46697E-08	Garem1
ENSMUSG0C 8638.735717	-0.924120283	0.15176947	-6.088973497	1.13637E-09	2.54196E-08	Epn1
ENSMUSG0C 90.00574924	-3.322223155	0.545940805	-6.08531754	1.16261E-09	2.58604E-08	NA
ENSMUSG0C 55.54630728	-1.764780688	0.290093607	-6.083487013	1.17596E-09	2.6133E-08	A930001C03Rik
ENSMUSG0C 12985.23458	-2.117857166	0.348237777	-6.081641071	1.18959E-09	2.63864E-08	Acox1
ENSMUSG0C 96.07038785	-2.152353662	0.353903894	-6.081746204	1.18881E-09	2.63864E-08	Smad9
ENSMUSG0C 1704.381168	-2.220539262	0.365170464	-6.080829314	1.19563E-09	2.64956E-08	Abhd6
ENSMUSG0C 151.5149923	-2.581753522	0.424585857	-6.080639476	1.19704E-09	2.65023E-08	Abca8a
ENSMUSG0C 621.7018121	-1.699930644	0.279597236	-6.07992649	1.20238E-09	2.65956E-08	Neurl1b
ENSMUSG0C 35.38623684	-3.329868369	0.547778628	-6.078857771	1.21042E-09	2.67485E-08	NA
ENSMUSG0C 2588.212221	-2.068364713	0.340773195	-6.069622671	1.28211E-09	2.81745E-08	Prr15
ENSMUSG0C 2639.592034	-1.817716881	0.29953362	-6.068490349	1.29118E-09	2.83225E-08	Hectd3
ENSMUSG0C 558.1966119	-1.691011048	0.278763264	-6.066118703	1.31038E-09	2.87172E-08	Icosl
ENSMUSG0C 13607.6675	-3.442020548	0.567623115	-6.063918922	1.32844E-09	2.90861E-08	Pmp22
ENSMUSG0C 424.1283959	-1.150511211	0.18984338	-6.060317786	1.35853E-09	2.96356E-08	Lysmd4
ENSMUSG0C 3830.017961	-1.219549853	0.201272787	-6.059188975	1.3681E-09	2.9817E-08	Plekha6
ENSMUSG0C 3792.337108	-2.19256148	0.361989834	-6.056969771	1.3871E-09	3.01757E-08	Noct
ENSMUSG0C 521.8776249	-1.207585198	0.199460332	-6.054262455	1.41062E-09	3.06595E-08	Klhl18
ENSMUSG0C 1244.687053	-1.026434329	0.169596218	-6.052224172	1.42859E-09	3.09651E-08	Bahd1
ENSMUSG0C 3048.045451	-1.623801638	0.26841597	-6.049571624	1.45231E-09	3.13647E-08	Acadm
ENSMUSG0C 2176.551973	-3.838486215	0.634679783	-6.047910014	1.46737E-09	3.16323E-08	Ceacam20
ENSMUSG0C 942.5135932	-2.017422049	0.333700477	-6.045607337	1.48848E-09	3.20584E-08	Rundc3b
ENSMUSG0C 297.7494494	-1.446570465	0.23931373	-6.044661401	1.49724E-09	3.22178E-08	Adgrg6
ENSMUSG0C 20.79705111	-3.278763613	0.542771213	-6.04078392	1.53367E-09	3.29421E-08	Gm17182
ENSMUSG0C 2630.10905	-1.414443652	0.234208939	-6.039238539	1.54843E-09	3.3229E-08	Arhgap27
ENSMUSG0C 81.17113205	-2.937258909	0.486550919	-6.03689931	1.57104E-09	3.36533E-08	Krt222
ENSMUSG0C 23.17939073	-3.530077113	0.584765192	-6.036742889	1.57256E-09	3.36556E-08	Gria1
ENSMUSG0C 1188.362055	-1.179276084	0.195406021	-6.035003832	1.58959E-09	3.39589E-08	Arhgap17
ENSMUSG0C 51.57171117	-3.016257139	0.49984774	-6.034351853	1.59602E-09	3.40656E-08	Calcb
ENSMUSG0C 1655.890837	-1.1236292	0.186441774	-6.026703009	1.67338E-09	3.55253E-08	Ap3b1
ENSMUSG0C 4352.558678	-1.643888435	0.272817554	-6.025596265	1.68487E-09	3.57374E-08	Abr
ENSMUSG0C 84.00150363	-2.930471801	0.486446674	-6.024240596	1.69905E-09	3.6006E-08	Kcnd3
ENSMUSG0C 25.44090859	-2.151742155	0.357312313	-6.022020733	1.72253E-09	3.64709E-08	Atcay
ENSMUSG0C 28.40872216	-2.928637687	0.486433811	-6.020629366	1.7374E-09	3.66877E-08	Gng3
ENSMUSG0C 522.1150498	-3.071374741	0.510130937	-6.020757645	1.73603E-09	3.66877E-08	1700024P16Rik
ENSMUSG0C 12.0031558	-4.459417397	0.741872861	-6.011026464	1.84352E-09	3.87564E-08	NA
ENSMUSG0C 251.3145253	-2.067770782	0.345582752	-6.009474628	1.86125E-09	3.90946E-08	Lcor
ENSMUSG0C 187.6266164	-2.665778386	0.44377695	-6.007023098	1.88961E-09	3.9655E-08	Hlf
ENSMUSG0C 15.49235521	-3.472330426	0.578566799	-6.00160678	1.95374E-09	4.09648E-08	Smim9
ENSMUSG0C 18.85734188	-4.232069016	0.70529941	-6.000386441	1.96848E-09	4.11656E-08	Slc34a3
ENSMUSG0C 853.6436249	-1.197031448	0.199492482	-6.000383745	1.96852E-09	4.11656E-08	Slc35a5
ENSMUSG0C 31.88083693	-2.110876102	0.351806094	-6.000112385	1.97181E-09	4.11982E-08	NA
ENSMUSG0C 49568.16794	-3.579666538	0.596667511	-5.999432639	1.98008E-09	4.13346E-08	NA

ENSMUSG0C 646.3420536	-1.719600175	0.286672487	-5.998483475	1.99169E-09	4.15404E-08	Shpk
ENSMUSG0C 2427.184271	-1.099166732	0.183324099	-5.99575689	2.0254E-09	4.21325E-08	Ehbp111
ENSMUSG0C 25969.02533	-1.4620711	0.243968482	-5.992868789	2.06171E-09	4.28504E-08	Cldn7
ENSMUSG0C 867.0955032	-2.538190022	0.423573966	-5.992318282	2.06871E-09	4.29582E-08	Map3k6
ENSMUSG0C 235.8094566	-2.9530705	0.492874865	-5.991521809	2.07886E-09	4.30938E-08	Colec10
ENSMUSG0C 9521.200501	-2.190881302	0.365660094	-5.991578891	2.07813E-09	4.30938E-08	Itpk1
ENSMUSG0C 111.5730723	-2.458067863	0.410516722	-5.987741141	2.12775E-09	4.40688E-08	Resp18
ENSMUSG0C 82390.74519	-5.994354043	1.001162731	-5.987392318	2.13232E-09	4.41047E-08	Fabp6
ENSMUSG0C 41.83459213	-2.522225062	0.421260733	-5.987325338	2.1332E-09	4.41047E-08	Pnmal1
ENSMUSG0C 503.6230968	-2.919614598	0.487855382	-5.984590322	2.16935E-09	4.46578E-08	Acot4
ENSMUSG0C 19.76316346	-2.459714118	0.411067203	-5.983727477	2.18088E-09	4.48563E-08	NA
ENSMUSG0C 1726.729784	-2.810201298	0.470190003	-5.97673553	2.27653E-09	4.67024E-08	Ptprr
ENSMUSG0C 1181.828148	-2.230128476	0.37328136	-5.974390142	2.30953E-09	4.72975E-08	Atp2b4
ENSMUSG0C 138.1236623	-1.414505247	0.236775152	-5.97404429	2.31443E-09	4.73571E-08	Napb
ENSMUSG0C 19130.69334	-2.61796606	0.438263786	-5.973493915	2.32225E-09	4.74763E-08	Slc6a8
ENSMUSG0C 9129.533805	-1.017900528	0.17044953	-5.971858832	2.34565E-09	4.79135E-08	Csrp1
ENSMUSG0C 28616.70051	-3.034995918	0.50828582	-5.971041882	2.35743E-09	4.81127E-08	Cdhr5
ENSMUSG0C 1074.661068	-2.799247687	0.469220378	-5.965741938	2.43525E-09	4.95731E-08	Fam83b
ENSMUSG0C 41206.7288	-2.568634457	0.430687238	-5.964036615	2.46082E-09	5.00147E-08	Vil1
ENSMUSG0C 21.38314215	-2.698489938	0.452462032	-5.964014098	2.46115E-09	5.00147E-08	Atp2b2
ENSMUSG0C 195.8705091	-3.970195428	0.666031699	-5.960970676	2.50744E-09	5.08683E-08	NA
ENSMUSG0C 65.19163055	-2.658821155	0.446179519	-5.959083828	2.53656E-09	5.14151E-08	Cnnm1
ENSMUSG0C 31.06177963	-2.575103385	0.432162354	-5.958648085	2.54333E-09	5.15084E-08	NA
ENSMUSG0C 2113.471511	-3.526776254	0.592136848	-5.956015516	2.58462E-09	5.22661E-08	C530008M17Rik
ENSMUSG0C 1321.666912	-2.274088315	0.381896135	-5.954729853	2.60502E-09	5.26231E-08	Nuak2
ENSMUSG0C 3113.00052	-1.648723858	0.277130106	-5.949277336	2.69329E-09	5.42219E-08	Papss1
ENSMUSG0C 1726.040414	-1.422910126	0.239349085	-5.944915663	2.76599E-09	5.54974E-08	Spata2
ENSMUSG0C 1878.478417	-1.49241029	0.25108295	-5.9438934	2.78331E-09	5.57977E-08	Sowahb
ENSMUSG0C 12.20383934	-3.461632711	0.582694951	-5.940728853	2.83758E-09	5.68377E-08	Chat
ENSMUSG0C 76.52789242	-2.467571783	0.415519358	-5.938524248	2.87599E-09	5.74618E-08	Optc
ENSMUSG0C 20923.91975	-1.285571147	0.216611075	-5.934928051	2.93974E-09	5.85877E-08	Actn4
ENSMUSG0C 10081.71025	-1.849993264	0.311956684	-5.930288902	3.02402E-09	6.02168E-08	Myo1d
ENSMUSG0C 4014.812299	-1.148256603	0.193641409	-5.929809166	3.03287E-09	6.03424E-08	Ncor1
ENSMUSG0C 89.01623395	-1.741274707	0.293763046	-5.927480442	3.07618E-09	6.10507E-08	Klhl29
ENSMUSG0C 3326.2537	-0.938043992	0.158323762	-5.924846549	3.12589E-09	6.19338E-08	Tmem127
ENSMUSG0C 74.18847743	-3.763233777	0.635594104	-5.920812908	3.20354E-09	6.33139E-08	Pkhd111
ENSMUSG0C 2348.770197	-3.253595446	0.549637133	-5.919533542	3.22856E-09	6.37024E-08	Abat
ENSMUSG0C 2085.629177	-3.301469606	0.558014712	-5.916456208	3.28952E-09	6.48502E-08	Sym
ENSMUSG0C 510.5539128	-2.017584669	0.341162666	-5.913849531	3.34203E-09	6.57229E-08	Sdpr
ENSMUSG0C 809.6306957	-2.493656643	0.421714314	-5.913142054	3.35642E-09	6.59514E-08	Slc5a6
ENSMUSG0C 1586.666854	-1.855611968	0.313909527	-5.911295472	3.39428E-09	6.6585E-08	Nol4l
ENSMUSG0C 84.93604773	-1.969887442	0.333329889	-5.909723386	3.42683E-09	6.71681E-08	NA
ENSMUSG0C 2082.934752	-2.267454712	0.383932308	-5.905871077	3.50788E-09	6.87001E-08	Epha1
ENSMUSG0C 376.5380439	-1.648378568	0.279468641	-5.898259509	3.67356E-09	7.18264E-08	Slc2a4
ENSMUSG0C 3837.77885	-1.601529162	0.271723264	-5.893971453	3.77022E-09	7.35348E-08	Tmem8
ENSMUSG0C 4404.141797	-3.383407804	0.574386845	-5.890468828	3.85102E-09	7.5049E-08	Cyp4b1
ENSMUSG0C 266.182946	-2.477432656	0.420611827	-5.890068937	3.86035E-09	7.51076E-08	Rasd2
ENSMUSG0C 1186.835948	-0.898562544	0.152646473	-5.886559489	3.94318E-09	7.63704E-08	Tmem245
ENSMUSG0C 3082.004161	-1.625174396	0.276148234	-5.88515223	3.97688E-09	7.69338E-08	Optn
ENSMUSG0C 2565.324315	-1.25455965	0.213288335	-5.881989058	4.05365E-09	7.81644E-08	Ptdss1
ENSMUSG0C 727.4119425	-3.1277086	0.531906874	-5.880180824	4.09819E-09	7.8895E-08	Edn3
ENSMUSG0C 4543.556933	-2.225963338	0.378977972	-5.873595571	4.26443E-09	8.2029E-08	Tmc5
ENSMUSG0C 72.07716527	-2.570889305	0.437864829	-5.871422264	4.32072E-09	8.28435E-08	NA
ENSMUSG0C 2131.038248	-2.059929456	0.351075156	-5.867488552	4.42446E-09	8.46957E-08	Kif21b
ENSMUSG0C 24.3800437	-3.042767318	0.518941885	-5.863406689	4.53466E-09	8.66656E-08	Ankrd63
ENSMUSG0C 870.4586227	-3.488552125	0.595052563	-5.862594905	4.55689E-09	8.70205E-08	Rims1
ENSMUSG0C 124.8782072	-2.475007763	0.42220707	-5.862070862	4.5713E-09	8.72255E-08	Casq2
ENSMUSG0C 1620.981554	-1.269060106	0.216509439	-5.861453943	4.58832E-09	8.748E-08	Xpr1
ENSMUSG0C 212.574823	-2.999282924	0.511749178	-5.860845612	4.60516E-09	8.77128E-08	Hoxb5
ENSMUSG0C 1640.442174	-1.105527742	0.188636864	-5.860613463	4.6116E-09	8.77128E-08	Lonp2
ENSMUSG0C 70.07436139	-2.473100988	0.422265438	-5.856744994	4.72027E-09	8.95361E-08	Olfrr898
ENSMUSG0C 13372.67391	-1.743754793	0.297861578	-5.854245464	4.7918E-09	9.07045E-08	S100a10
ENSMUSG0C 116.7279037	-3.016328849	0.515563685	-5.850545596	4.89963E-09	9.26717E-08	Lpar3
ENSMUSG0C 16582.08632	-2.56644761	0.438785415	-5.848981119	4.94593E-09	9.3473E-08	Eps8l3
ENSMUSG0C 955.339815	-1.470910574	0.251526207	-5.84794161	4.97693E-09	9.39094E-08	Ifih1
ENSMUSG0C 1247.116951	-1.900381158	0.324977666	-5.8477285	4.98331E-09	9.39552E-08	Pof1b
ENSMUSG0C 1179.205404	-1.276594393	0.218565782	-5.840778826	5.19573E-09	9.7573E-08	Cyp4f13

ENSMUSG0C 1554.371172	-2.054138573	0.352016774	-5.835342878	5.36801E-09	1.00649E-07	Lhfp12
ENSMUSG0C 807.8297206	-1.831090661	0.313855942	-5.834175538	5.40572E-09	1.01276E-07	Cmpk2
ENSMUSG0C 2767.529867	-1.923076458	0.329717575	-5.832496054	5.46043E-09	1.02221E-07	Il17rc
ENSMUSG0C 34.59780102	-2.442685254	0.418850214	-5.831882547	5.48055E-09	1.02436E-07	NA
ENSMUSG0C 144.2250362	-1.663499347	0.285266493	-5.831387089	5.49685E-09	1.0266E-07	Pnmal2
ENSMUSG0C 3579.940285	-1.497744863	0.256880619	-5.830509407	5.52584E-09	1.03039E-07	Arhgef16
ENSMUSG0C 1093.181288	-1.517687512	0.260374022	-5.828874563	5.58024E-09	1.03972E-07	Tnik
ENSMUSG0C 1324.160653	-3.159332914	0.542671557	-5.821814091	5.82123E-09	1.08292E-07	Themis3
ENSMUSG0C 726.8473238	-1.677402735	0.288152216	-5.821238374	5.84132E-09	1.08581E-07	Mylip
ENSMUSG0C 2341.526171	-2.765404106	0.475304625	-5.818172101	5.94946E-09	1.10418E-07	Kbtbd11
ENSMUSG0C 69.10449498	-2.490783918	0.428142454	-5.81765226	5.96799E-09	1.10676E-07	Ppm1e
ENSMUSG0C 1327.388537	-3.100785846	0.533698536	-5.809995043	6.24747E-09	1.15588E-07	Myrf1
ENSMUSG0C 1579.286241	-2.048794757	0.352778488	-5.80759549	6.33764E-09	1.17165E-07	Lipe
ENSMUSG0C 97.90886019	-1.898840371	0.327082979	-5.805378129	6.42209E-09	1.18542E-07	Ank1
ENSMUSG0C 39.07091142	-1.977965781	0.34096176	-5.801136706	6.58669E-09	1.21297E-07	Sphkap
ENSMUSG0C 9871.134841	-1.691016892	0.291507757	-5.800932734	6.59471E-09	1.21351E-07	Misp
ENSMUSG0C 37.36767002	-3.485713495	0.601026935	-5.799596143	6.64748E-09	1.22148E-07	Cfap57
ENSMUSG0C 1947.435499	-1.478277906	0.254899867	-5.799445566	6.65345E-09	1.22148E-07	Lmbrd1
ENSMUSG0C 2059.668621	-1.740739487	0.300172517	-5.799130126	6.66598E-09	1.22283E-07	Relb
ENSMUSG0C 39.13015101	-2.446718677	0.421957587	-5.798494328	6.6913E-09	1.22464E-07	Syt6
ENSMUSG0C 1166.903074	-1.844661182	0.318158891	-5.797924357	6.71407E-09	1.22692E-07	Selenbp1
ENSMUSG0C 27.41361172	-3.890013187	0.671091248	-5.796548832	6.76935E-09	1.23607E-07	Defa35
ENSMUSG0C 93.87165158	-2.578085154	0.445316754	-5.7893289	7.06682E-09	1.28841E-07	Sh2d7
ENSMUSG0C 1965.335053	-1.489483303	0.25731348	-5.788594138	7.0978E-09	1.29306E-07	Snrk
ENSMUSG0C 18.37537837	-3.343946313	0.578337855	-5.781994524	7.38201E-09	1.34175E-07	Fgf12
ENSMUSG0C 16.52359087	-3.235283265	0.559644237	-5.780964135	7.42737E-09	1.34897E-07	Kcng4
ENSMUSG0C 9762.651331	-2.581951352	0.447275236	-5.772623081	7.80469E-09	1.41317E-07	Aldh1b1
ENSMUSG0C 96.29479538	-1.964355938	0.340319734	-5.772089426	7.82945E-09	1.41658E-07	Fbxl16
ENSMUSG0C 145.1170885	-2.063698843	0.357598897	-5.770987719	7.88082E-09	1.42479E-07	Kcnmb1
ENSMUSG0C 723.6718598	-1.109876441	0.192335897	-5.77051117	7.90314E-09	1.42773E-07	Dopey1
ENSMUSG0C 669.9196112	-1.089801056	0.188865957	-5.770235544	7.91608E-09	1.42898E-07	Cyb561d1
ENSMUSG0C 500.905829	-2.909712024	0.50434227	-5.769320158	7.9592E-09	1.43568E-07	Tnxb
ENSMUSG0C 10.63396286	-4.612899105	0.799751484	-5.767915655	8.0258E-09	1.44659E-07	Kcnd2
ENSMUSG0C 15.32218111	-2.863655824	0.496562551	-5.766958905	8.07147E-09	1.45327E-07	Nkx3-2
ENSMUSG0C 136.2944386	-3.726277981	0.646151047	-5.766883765	8.07507E-09	1.45327E-07	Kif27
ENSMUSG0C 1407.027388	-1.443765019	0.250392859	-5.765999177	8.11755E-09	1.45981E-07	Slc25a44
ENSMUSG0C 50.83476441	-2.397310081	0.415845146	-5.764910584	8.17011E-09	1.46704E-07	Prkg1
ENSMUSG0C 54.73302247	-2.024667526	0.351291678	-5.763494137	8.23901E-09	1.47829E-07	Siglec1
ENSMUSG0C 54.19331792	-2.714108526	0.471112374	-5.76106397	8.35854E-09	1.49635E-07	4930526L06Rik
ENSMUSG0C 3071.199686	-1.188858322	0.206406919	-5.759779406	8.42239E-09	1.50664E-07	Sipa1l3
ENSMUSG0C 35.86112994	-2.741724672	0.476230275	-5.757140646	8.55506E-09	1.52923E-07	Tmem132b
ENSMUSG0C 29.98710008	-2.570795416	0.446884171	-5.752710842	8.78236E-09	1.56868E-07	NA
ENSMUSG0C 80.45303625	-3.210308119	0.55867747	-5.746263791	9.12369E-09	1.62476E-07	Scgn
ENSMUSG0C 226.768543	-1.732920846	0.301586281	-5.746020148	9.13684E-09	1.62588E-07	Ccdc85c
ENSMUSG0C 2010.68129	-2.452161495	0.427136635	-5.740929938	9.4158E-09	1.67301E-07	Entpd8
ENSMUSG0C 751.7496857	-1.751346841	0.305234295	-5.737713193	9.59634E-09	1.70382E-07	Ovol1
ENSMUSG0C 1361.780589	-1.312895098	0.228912286	-5.735363193	9.73036E-09	1.72503E-07	Jarid2
ENSMUSG0C 1343.645382	-1.379406692	0.240569173	-5.733929568	9.81301E-09	1.7358E-07	Nlrc4
ENSMUSG0C 37.39293369	-3.020356249	0.527094172	-5.730202328	1.00311E-08	1.77174E-07	NA
ENSMUSG0C 332.7663095	-2.359313606	0.411759973	-5.729827474	1.00533E-08	1.77434E-07	NA
ENSMUSG0C 2177.593396	-2.216787076	0.387116874	-5.726402601	1.02583E-08	1.80783E-07	Lpin3
ENSMUSG0C 4810.922897	-3.599410342	0.628845803	-5.723836154	1.04145E-08	1.83401E-07	Malrd1
ENSMUSG0C 1368.560785	-1.516107579	0.264886365	-5.723615018	1.04281E-08	1.83499E-07	Fam53b
ENSMUSG0C 14.52442565	-4.358880941	0.761577002	-5.723493391	1.04356E-08	1.83499E-07	NA
ENSMUSG0C 272.6202332	-1.503830021	0.262851013	-5.721225898	1.05758E-08	1.85596E-07	Snph
ENSMUSG0C 4095.783452	-2.15795831	0.377456173	-5.7171096	1.08351E-08	1.89822E-07	Ush1c
ENSMUSG0C 2557.429975	-2.259057848	0.395366809	-5.713827759	1.10463E-08	1.93237E-07	F2r1
ENSMUSG0C 88.89433618	-2.186790678	0.382855269	-5.711794652	1.11791E-08	1.95272E-07	Ablim2
ENSMUSG0C 6661.122269	-2.181958273	0.382386383	-5.706161012	1.15553E-08	2.01547E-07	Aldh9a1
ENSMUSG0C 323.2116013	-1.929206229	0.338172881	-5.70479284	1.16485E-08	2.03023E-07	Nek3
ENSMUSG0C 4394.092689	-0.965541501	0.169299	-5.703173108	1.17597E-08	2.04663E-07	Cdk11b
ENSMUSG0C 8349.136071	-2.215202815	0.388516363	-5.701697606	1.1862E-08	2.05839E-07	Erbin
ENSMUSG0C 301.4553403	-3.215851719	0.564092603	-5.700928716	1.19156E-08	2.06619E-07	Spib
ENSMUSG0C 2150.455869	-1.341399518	0.235371241	-5.699079948	1.20456E-08	2.0872E-07	Sema4b
ENSMUSG0C 15.13990457	-3.086840661	0.541700314	-5.698428781	1.20917E-08	2.09366E-07	Rnf112
ENSMUSG0C 82.57245609	-2.512660051	0.441008639	-5.697530231	1.21555E-08	2.10318E-07	Fgf13
ENSMUSG0C 4204.478723	-1.267972673	0.222634139	-5.695320039	1.23141E-08	2.12597E-07	Cpt1a

ENSMUSG0C 14.8531716	-3.077146593	0.540611891	-5.691969872	1.25582E-08	2.16497E-07	NA
ENSMUSG0C 2191.543233	-2.15927954	0.379805996	-5.685217099	1.30647E-08	2.24414E-07	Rorc
ENSMUSG0C 866.9419085	-0.948119644	0.166781817	-5.684790226	1.30973E-08	2.24812E-07	Bag4
ENSMUSG0C 15.93953507	-3.303519208	0.58151878	-5.680846988	1.34029E-08	2.29892E-07	Fam155a
ENSMUSG0C 11733.03912	-3.435316181	0.605174473	-5.676571526	1.37421E-08	2.3537E-07	Dpp4
ENSMUSG0C 2031.117321	-1.725911944	0.304308989	-5.671577273	1.41489E-08	2.42162E-07	Irs2
ENSMUSG0C 1214.043855	-1.798915926	0.317296265	-5.669514968	1.43202E-08	2.44918E-07	2610528J11Rik
ENSMUSG0C 1033.567894	-1.507833403	0.266043259	-5.66762492	1.4479E-08	2.47278E-07	Ngef
ENSMUSG0C 318.0279168	-1.131444647	0.199690172	-5.666000669	1.46169E-08	2.49274E-07	Pigl
ENSMUSG0C 14.42002682	-3.16606729	0.558997265	-5.663833243	1.48028E-08	2.52083E-07	NA
ENSMUSG0C 751.6782401	-2.859784484	0.505202553	-5.660669111	1.50784E-08	2.56592E-07	Fgfbp1
ENSMUSG0C 134.5638453	-2.546193232	0.450003431	-5.658164042	1.53001E-08	2.60178E-07	Hand1
ENSMUSG0C 4206.186332	-1.464344845	0.258922298	-5.655537799	1.55359E-08	2.63999E-07	Cdx2
ENSMUSG0C 1137.885625	-2.080700377	0.368158206	-5.651647425	1.58917E-08	2.6966E-07	Leng9
ENSMUSG0C 972.1276733	-1.963890329	0.347602903	-5.649809915	1.60625E-08	2.72364E-07	Tmem82
ENSMUSG0C 575.5398157	-1.588790207	0.281327282	-5.647480038	1.62817E-08	2.7549E-07	Zfp467
ENSMUSG0C 1434.664556	-1.401366115	0.248168339	-5.646836818	1.63427E-08	2.76129E-07	Dolpp1
ENSMUSG0C 2536.271716	-1.420413632	0.251588036	-5.645791654	1.64423E-08	2.77417E-07	Nr3c1
ENSMUSG0C 4112.721026	-2.222686022	0.39371606	-5.645403503	1.64794E-08	2.77846E-07	Epb4113
ENSMUSG0C 2435.897582	-1.901168552	0.336950588	-5.642276996	1.67816E-08	2.8214E-07	Slc4a4
ENSMUSG0C 191.9162762	-2.891082634	0.512503173	-5.641101921	1.68965E-08	2.83871E-07	NA
ENSMUSG0C 26.79540735	-3.200162789	0.567537165	-5.638684106	1.71355E-08	2.87227E-07	Chrm4
ENSMUSG0C 1186.104203	-0.935457277	0.165946575	-5.637099039	1.72939E-08	2.89319E-07	Map3k1
ENSMUSG0C 271.8681354	-1.717334548	0.304815533	-5.634012577	1.76064E-08	2.94341E-07	Trim14
ENSMUSG0C 2794.276421	-2.3572472	0.418534597	-5.632144191	1.77983E-08	2.97339E-07	Plbd1
ENSMUSG0C 2163.966092	-1.143016208	0.203156981	-5.626270903	1.84147E-08	3.06989E-07	Pde4dip
ENSMUSG0C 359.5177276	-1.590624011	0.282803084	-5.624493156	1.86053E-08	3.09733E-07	Ganc
ENSMUSG0C 4018.39035	-1.953707445	0.3476129	-5.620353695	1.90567E-08	3.17024E-07	Gipc2
ENSMUSG0C 547.7540581	-3.697427331	0.65836756	-5.616053338	1.95368E-08	3.23427E-07	Tppp
ENSMUSG0C 84.66958669	-4.657758337	0.829896439	-5.612457308	1.99473E-08	3.29304E-07	Zdhhc19
ENSMUSG0C 2413.870378	-1.755905625	0.312883395	-5.612012819	1.99987E-08	3.29909E-07	Pld1
ENSMUSG0C 1492.368252	-2.720158554	0.485671979	-5.611109298	2.01034E-08	3.3119E-07	Synpo2
ENSMUSG0C 64.83503856	-2.635389262	0.469777151	-5.609871097	2.02477E-08	3.33337E-07	Lingo4
ENSMUSG0C 4766.77082	-4.076683267	0.72683382	-5.608824406	2.03706E-08	3.34895E-07	Slc51b
ENSMUSG0C 31.04417167	-2.260791368	0.403242236	-5.606534148	2.06418E-08	3.3912E-07	NA
ENSMUSG0C 18.56374379	-2.562832094	0.457407011	-5.602957613	2.10725E-08	3.45717E-07	NA
ENSMUSG0C 1554.954833	-3.179815427	0.567675487	-5.601466858	2.12545E-08	3.47983E-07	AY761184
ENSMUSG0C 393.1161238	-3.26360418	0.582888093	-5.59902358	2.15562E-08	3.52436E-07	NA
ENSMUSG0C 70.85968734	-2.238898676	0.399938952	-5.598101071	2.16712E-08	3.54073E-07	Dlg2
ENSMUSG0C 2879.903282	-1.965031345	0.351568931	-5.589320254	2.2796E-08	3.71428E-07	Gucd1
ENSMUSG0C 1724.852978	-1.211404028	0.216875929	-5.585700687	2.3276E-08	3.78989E-07	Dopey2
ENSMUSG0C 1309.699264	-2.260773661	0.405028349	-5.581766476	2.38088E-08	3.87133E-07	P2ry2
ENSMUSG0C 846.4039178	-2.208964786	0.396011152	-5.578036815	2.43248E-08	3.94713E-07	Nr1h3
ENSMUSG0C 2329.530261	-1.248968467	0.224060878	-5.574237134	2.48617E-08	4.02875E-07	Nedd4l
ENSMUSG0C 1586.200783	-1.546512923	0.277679782	-5.569411337	2.55601E-08	4.13347E-07	Ttyh2
ENSMUSG0C 9.021733247	-3.853244713	0.692100447	-5.567464562	2.58473E-08	4.17422E-07	Rab9b
ENSMUSG0C 658.0037349	-3.28191834	0.589496416	-5.567325352	2.58679E-08	4.17472E-07	Ang4
ENSMUSG0C 159.7489593	-2.033650003	0.365401246	-5.565525638	2.61363E-08	4.20946E-07	Gm609
ENSMUSG0C 5452.342522	-0.828558697	0.149001738	-5.560731778	2.68646E-08	4.31796E-07	Mcf2
ENSMUSG0C 573.062932	-1.939145602	0.348792173	-5.559601824	2.70391E-08	4.34014E-07	Ggt6
ENSMUSG0C 2980.062663	-1.870958985	0.337018013	-5.551510344	2.83212E-08	4.53674E-07	Clcn2
ENSMUSG0C 4249.130194	-1.890918114	0.340650378	-5.550905664	2.84193E-08	4.54939E-07	Baiap2l2
ENSMUSG0C 2414.907675	-1.43019675	0.257666985	-5.550562674	2.84752E-08	4.55526E-07	Pkn2
ENSMUSG0C 2806.676101	-1.097821676	0.197803086	-5.550073536	2.85549E-08	4.56495E-07	Ttc7
ENSMUSG0C 57.95244977	-1.976232507	0.356318819	-5.546247909	2.91865E-08	4.65964E-07	Gng4
ENSMUSG0C 12.15319156	-3.438226184	0.620018458	-5.545361009	2.93348E-08	4.68018E-07	Ntsr1
ENSMUSG0C 11.07854225	-4.047759523	0.730187088	-5.543455355	2.9656E-08	4.72191E-07	Hs3st2
ENSMUSG0C 834.824236	-2.930097279	0.528723384	-5.541834096	2.9932E-08	4.76265E-07	Pdlim3
ENSMUSG0C 13.16914288	-3.257055624	0.587901988	-5.540133711	3.02241E-08	4.8027E-07	NA
ENSMUSG0C 250.8853919	-1.986955464	0.358964035	-5.535249414	3.10786E-08	4.9253E-07	Snap25
ENSMUSG0C 835.873018	-1.188286667	0.214747779	-5.533406074	3.14071E-08	4.97074E-07	Hnf1a
ENSMUSG0C 60.98574136	-2.193484649	0.396453324	-5.532768967	3.15215E-08	4.98551E-07	Slc8a2
ENSMUSG0C 1331.967562	-0.972296523	0.175956271	-5.525785017	3.28016E-08	5.17763E-07	Nr2c2
ENSMUSG0C 3236.844652	-1.98478719	0.359307437	-5.523924607	3.3151E-08	5.22931E-07	2210016F16Rik
ENSMUSG0C 50.87891778	-2.977328484	0.539013106	-5.52366622	3.31998E-08	5.23179E-07	NA
ENSMUSG0C 6728.16954	-1.645844559	0.298016937	-5.522654427	3.33916E-08	5.25332E-07	Lpcat3
ENSMUSG0C 2655.15343	-0.813269716	0.147258208	-5.522746235	3.33742E-08	5.25332E-07	Gpbp1l1



ENSMUSG0C 50.23460336	-1.746754947	0.316448429	-5.519872396	3.39246E-08	5.33011E-07	Cbln3
ENSMUSG0C 2976.035228	-2.412542106	0.437108166	-5.519325174	3.40304E-08	5.3432E-07	Cnnm4
ENSMUSG0C 61.25526648	-3.151701034	0.571623815	-5.513592949	3.51581E-08	5.50571E-07	Gbp2b
ENSMUSG0C 3586.438896	-2.139680577	0.388129321	-5.512803237	3.53163E-08	5.52684E-07	Rnasel
ENSMUSG0C 14.40685819	-5.114521471	0.928144369	-5.510480524	3.57855E-08	5.5929E-07	Cyp2d40
ENSMUSG0C 3509.05406	-1.493731376	0.271098751	-5.509916109	3.59005E-08	5.60349E-07	Micu1
ENSMUSG0C 15654.2331	-2.741045279	0.497644796	-5.508035655	3.6286E-08	5.65995E-07	Pls1
ENSMUSG0C 11010.55928	-1.420705471	0.258012826	-5.506336616	3.66378E-08	5.70584E-07	Ogdh
ENSMUSG0C 31689.5652	-3.265188078	0.593223635	-5.504143608	3.70967E-08	5.77125E-07	Cdhr2
ENSMUSG0C 1369.301385	-1.343514316	0.244106972	-5.503793304	3.71705E-08	5.77895E-07	Lrrc75a
ENSMUSG0C 5963.572998	-0.959963188	0.174482561	-5.501771539	3.75994E-08	5.8418E-07	Sptlc2
ENSMUSG0C 514.3870837	-0.933262199	0.169647618	-5.501180698	3.77256E-08	5.85758E-07	Arid4a
ENSMUSG0C 62.13495154	-1.899629137	0.345414411	-5.499565386	3.80729E-08	5.90378E-07	Cntn1
ENSMUSG0C 6364.741033	-1.346748857	0.245284682	-5.490554265	4.00674E-08	6.20497E-07	Plpp2
ENSMUSG0C 942.9373977	-2.206000348	0.40190088	-5.488916447	4.04407E-08	6.25462E-07	Col6a4
ENSMUSG0C 14.98434561	-3.361729619	0.612485442	-5.488668614	4.04975E-08	6.25932E-07	Lrrtm3
ENSMUSG0C 168.8494031	-1.794468336	0.327071197	-5.48647619	4.10031E-08	6.33335E-07	Adamts13
ENSMUSG0C 100.7352082	-3.276361752	0.597474732	-5.483682536	4.16562E-08	6.42588E-07	Htr3a
ENSMUSG0C 37.19885998	-2.564505493	0.467826898	-5.481740151	4.21163E-08	6.48842E-07	Spock3
ENSMUSG0C 8.981653864	-4.101440551	0.748523515	-5.47937435	4.26832E-08	6.5715E-07	NA
ENSMUSG0C 1918.464609	-2.322973376	0.424009291	-5.478590746	4.28727E-08	6.59269E-07	Osr2
ENSMUSG0C 121.8753316	-2.681464627	0.489521338	-5.477727776	4.30822E-08	6.61578E-07	Kcnn3
ENSMUSG0C 1785.079783	-3.578033938	0.653192757	-5.477761201	4.30741E-08	6.61578E-07	Prlr
ENSMUSG0C 5936.069717	-1.76799497	0.323023034	-5.473278326	4.41785E-08	6.76228E-07	Stard4
ENSMUSG0C 7396.709999	-2.771101374	0.506321086	-5.47301199	4.4245E-08	6.76555E-07	Iqgap2
ENSMUSG0C 10.92499908	-3.136938668	0.57316992	-5.472964571	4.42569E-08	6.76555E-07	Nrsn2
ENSMUSG0C 89.74565578	-2.734181351	0.499882288	-5.469650388	4.50924E-08	6.88E-07	B3gnt6
ENSMUSG0C 2471.664174	-1.655347361	0.302743527	-5.467820827	4.55602E-08	6.94691E-07	Mtmr4
ENSMUSG0C 402.9060548	-3.264564607	0.597341048	-5.465160343	4.62489E-08	7.03836E-07	Aqp7
ENSMUSG0C 65.37468069	-1.789391574	0.327514723	-5.463545452	4.66718E-08	7.09817E-07	NA
ENSMUSG0C 1165.613463	-1.166602745	0.213561193	-5.462615793	4.69169E-08	7.12633E-07	Fgd4
ENSMUSG0C 71.52766005	-3.186018149	0.583887575	-5.456560967	4.85445E-08	7.35005E-07	NA
ENSMUSG0C 2968.788852	-1.849629048	0.339512648	-5.447894376	5.09696E-08	7.68784E-07	Mgat3
ENSMUSG0C 26.06990614	-3.255216396	0.59754279	-5.447670778	5.10337E-08	7.69262E-07	Serpina1e
ENSMUSG0C 243.4754818	-2.100428615	0.385759056	-5.444923667	5.18276E-08	7.80239E-07	Adap2
ENSMUSG0C 13.02898279	-3.371998547	0.619572384	-5.442461016	5.25495E-08	7.89106E-07	Lrrc4b
ENSMUSG0C 13624.04663	-3.359349256	0.61751028	-5.440151146	5.32354E-08	7.98901E-07	Myh11
ENSMUSG0C 1411.656693	-2.869673063	0.527556843	-5.439552349	5.34146E-08	8.00637E-07	Gm8909
ENSMUSG0C 2428.664497	-2.527114699	0.464897135	-5.435857767	5.45334E-08	8.16833E-07	1810011O10Rik
ENSMUSG0C 2082.156191	-1.23943665	0.228018787	-5.435677756	5.45885E-08	8.17143E-07	Mfsd6
ENSMUSG0C 79.62574569	-2.708708363	0.498364331	-5.435197093	5.47359E-08	8.18832E-07	AW551984
ENSMUSG0C 1277.250388	-1.786977208	0.32879328	-5.4349566	5.48098E-08	8.19422E-07	Rb1
ENSMUSG0C 1991.971771	-1.444276428	0.265894676	-5.431761366	5.58005E-08	8.33709E-07	Fam214b
ENSMUSG0C 22343.1316	-3.921903061	0.722281535	-5.42988138	5.63915E-08	8.41481E-07	C1ca4a
ENSMUSG0C 1548.138395	-0.923164098	0.170036563	-5.42920934	5.66043E-08	8.44125E-07	Rab24
ENSMUSG0C 690.7824699	-1.495748699	0.275586038	-5.427519872	5.71425E-08	8.51083E-07	Mb21d2
ENSMUSG0C 9324.88773	-1.265283432	0.233152288	-5.426854029	5.7356E-08	8.53193E-07	Mvp
ENSMUSG0C 2137.445715	-1.313891076	0.242332601	-5.42185027	5.89853E-08	8.75784E-07	Pxk
ENSMUSG0C 660.0622596	-3.019901259	0.557359598	-5.418227779	6.01927E-08	8.9263E-07	Lmod1
ENSMUSG0C 26.91471949	-2.1621651	0.399099237	-5.417612719	6.04001E-08	8.95112E-07	Ppp1r1a
ENSMUSG0C 347.9777778	-2.658067454	0.490740762	-5.416439102	6.07977E-08	9.00443E-07	Glp2r
ENSMUSG0C 507.0886525	-3.313922658	0.611861993	-5.416127649	6.09036E-08	9.0145E-07	Bco1
ENSMUSG0C 1090.824171	-1.70109003	0.314150835	-5.414883045	6.13288E-08	9.07177E-07	Fam13b
ENSMUSG0C 170.8291893	-2.47141998	0.456539614	-5.41337467	6.18479E-08	9.13201E-07	Pax8
ENSMUSG0C 34.38662621	-2.694921373	0.497922341	-5.41233271	6.2209E-08	9.17911E-07	Gm4956
ENSMUSG0C 4443.955164	-1.376164604	0.254338822	-5.410753242	6.27602E-08	9.24895E-07	Etnk1
ENSMUSG0C 19003.0369	-1.355685289	0.250573087	-5.410338782	6.29056E-08	9.26464E-07	Txnip
ENSMUSG0C 1122.321734	-1.309647078	0.242173147	-5.407895528	6.37696E-08	9.38025E-07	Tle4
ENSMUSG0C 2156.73591	-1.908100445	0.352854921	-5.407606157	6.38727E-08	9.3896E-07	C2cd2l
ENSMUSG0C 506.6884035	-1.645864901	0.304788185	-5.400028554	6.66303E-08	9.78288E-07	Farp2
ENSMUSG0C 867.7548611	-2.002769674	0.37090392	-5.399699402	6.67527E-08	9.79479E-07	Mtm1
ENSMUSG0C 2612.88569	-1.646614349	0.305066165	-5.397564657	6.75515E-08	9.89978E-07	Usp12
ENSMUSG0C 31.68563941	-2.05734688	0.381175028	-5.397381068	6.76207E-08	9.90052E-07	Elavl3
ENSMUSG0C 841.8837074	-2.752789109	0.51002794	-5.397330016	6.76399E-08	9.90052E-07	Sct
ENSMUSG0C 3328.378819	-1.241430461	0.230039869	-5.396588283	6.792E-08	9.93346E-07	Efna1
ENSMUSG0C 4494.39243	-0.825366842	0.153088121	-5.391449283	6.98917E-08	1.02112E-06	Wbp2
ENSMUSG0C 3271.137963	-1.906514604	0.353646783	-5.391013563	7.00614E-08	1.02297E-06	Fam98c



ENSMUSG0C 4689.978394	-2.30956602	0.428477416	-5.390169781	7.03911E-08	1.02716E-06	Prss23
ENSMUSG0C 1280.705893	-2.677017983	0.496901177	-5.387425323	7.14742E-08	1.04168E-06	Slc2a9
ENSMUSG0C 39.44064743	-3.586687716	0.666076648	-5.384797271	7.25263E-08	1.05637E-06	Cdh9
ENSMUSG0C 600.5576423	-2.176023883	0.404125753	-5.384521694	7.26375E-08	1.05734E-06	Vstm5
ENSMUSG0C 109.6748341	-3.530567899	0.65587897	-5.382956403	7.32723E-08	1.06527E-06	Lrrn4
ENSMUSG0C 1734.123892	-1.143403862	0.212425105	-5.382621148	7.34089E-08	1.06661E-06	Stxbp3
ENSMUSG0C 3107.534646	-3.646229043	0.677422743	-5.382501668	7.34577E-08	1.06666E-06	Prss30
ENSMUSG0C 3842.399314	-0.937302259	0.174298031	-5.377583734	7.54921E-08	1.09353E-06	Flii
ENSMUSG0C 12.78607098	-3.113770216	0.579024362	-5.377615213	7.54789E-08	1.09353E-06	Kcnj12
ENSMUSG0C 1161.06101	-1.637937927	0.304602826	-5.37729064	7.56151E-08	1.09464E-06	Naip2
ENSMUSG0C 871.4440138	-1.400418157	0.260462551	-5.376658387	7.58809E-08	1.09782E-06	Nadsyn1
ENSMUSG0C 1543.576469	-1.771156008	0.32951059	-5.375111039	7.65355E-08	1.10527E-06	Caskin2
ENSMUSG0C 19.96160579	-2.865294173	0.533190659	-5.373864158	7.70669E-08	1.11227E-06	Scn9a
ENSMUSG0C 5606.92963	-1.08457148	0.201921536	-5.371252123	7.81918E-08	1.12782E-06	Cdipt
ENSMUSG0C 5479.059504	-3.178358861	0.591821691	-5.370467002	7.8533E-08	1.13137E-06	Abcg2
ENSMUSG0C 552.314279	-3.079399084	0.57358081	-5.368727526	7.92941E-08	1.14026E-06	Chrm2
ENSMUSG0C 455.359008	-3.245286144	0.604475293	-5.368765577	7.92774E-08	1.14026E-06	Gm9994
ENSMUSG0C 768.2665205	-2.171266985	0.40446694	-5.368218685	7.95181E-08	1.14279E-06	P2ry1
ENSMUSG0C 3976.119331	-1.601084318	0.298275659	-5.367800795	7.97025E-08	1.14475E-06	Fbxl3
ENSMUSG0C 6516.669616	-1.870376379	0.348668934	-5.364333315	8.12487E-08	1.16414E-06	Agpat2
ENSMUSG0C 23.19512055	-2.720593898	0.507253021	-5.363386288	8.16761E-08	1.16885E-06	NA
ENSMUSG0C 3929.60313	-0.923461179	0.172209904	-5.362416191	8.21161E-08	1.17444E-06	Diaph1
ENSMUSG0C 3580.113993	-1.693315547	0.316025801	-5.358156017	8.40756E-08	1.19958E-06	Bcar1
ENSMUSG0C 2032.581984	-1.233075196	0.230216628	-5.35615175	8.50131E-08	1.21223E-06	Plekha1
ENSMUSG0C 199067.9765	-1.850491217	0.345553331	-5.355153757	8.54837E-08	1.21675E-06	COX1
ENSMUSG0C 7453.530295	-3.83134017	0.715679064	-5.353433348	8.63008E-08	1.22763E-06	Suox
ENSMUSG0C 12.73443929	-3.805943772	0.711101442	-5.352181202	8.69003E-08	1.23469E-06	Mab211l
ENSMUSG0C 1231.91429	-2.811267259	0.525380231	-5.350919383	8.75085E-08	1.24259E-06	Sowaha
ENSMUSG0C 767.9412833	-2.982090947	0.557656064	-5.347545087	8.91552E-08	1.26327E-06	Fer1l6
ENSMUSG0C 15706.40412	-2.515204055	0.470351398	-5.347499902	8.91775E-08	1.26327E-06	Slc27a4
ENSMUSG0C 2241.936938	-0.812796323	0.152064757	-5.345067048	9.03836E-08	1.27959E-06	Map3k11
ENSMUSG0C 2893.991257	-2.590822008	0.484754505	-5.34460636	9.06138E-08	1.28208E-06	Anks4b
ENSMUSG0C 146.0126691	-2.821275804	0.528068851	-5.342628709	9.16083E-08	1.29538E-06	Zfp385b
ENSMUSG0C 10700.04551	-1.41566845	0.265016516	-5.341812168	9.2022E-08	1.29969E-06	Gpa33
ENSMUSG0C 11.53721754	-4.269593311	0.799425928	-5.340824159	9.2525E-08	1.30601E-06	NA
ENSMUSG0C 4170.744585	-2.781634194	0.521056501	-5.338450225	9.37444E-08	1.31999E-06	Clrn3
ENSMUSG0C 182.9490221	-1.967106351	0.368485407	-5.338356187	9.37931E-08	1.31999E-06	Gm10516
ENSMUSG0C 1789.780266	-2.258777314	0.423299743	-5.336117845	9.49577E-08	1.3348E-06	Mertk
ENSMUSG0C 1731.065861	-1.321105997	0.247606726	-5.335501246	9.5281E-08	1.33855E-06	Vsig10
ENSMUSG0C 4517.655575	-2.062389473	0.386647422	-5.334031358	9.60559E-08	1.34864E-06	Lpin2
ENSMUSG0C 585.2838843	-1.788803477	0.335365029	-5.333899855	9.61256E-08	1.34882E-06	Kif13b
ENSMUSG0C 1493.98929	-4.034403169	0.756451587	-5.3332633	9.64298E-08	1.35229E-06	Gm14851
ENSMUSG0C 1197.767575	-1.080408129	0.20262323	-5.332103973	9.70813E-08	1.36063E-06	Plekha5
ENSMUSG0C 8348.037205	-2.048332488	0.384288036	-5.330201037	9.81041E-08	1.37334E-06	Cdkn1a
ENSMUSG0C 5362.019648	-1.981750859	0.371969529	-5.327723657	9.94513E-08	1.39138E-06	Cast
ENSMUSG0C 3195.843684	-1.71778399	0.322501452	-5.326437997	1.00157E-07	1.40044E-06	Igsf9
ENSMUSG0C 11.7877498	-4.067267711	0.763751563	-5.325380537	1.00742E-07	1.40778E-06	Iqub
ENSMUSG0C 187.3648234	-3.171491218	0.595832539	-5.322789557	1.02188E-07	1.42631E-06	NA
ENSMUSG0C 623.2906867	-1.44596174	0.271880442	-5.318373502	1.04699E-07	1.45793E-06	Osbpl10
ENSMUSG0C 60.36051679	-1.741485978	0.327640931	-5.315227172	1.06524E-07	1.47988E-06	Nyx
ENSMUSG0C 9.760157828	-3.453301638	0.649725914	-5.315012938	1.0665E-07	1.47989E-06	Grpr
ENSMUSG0C 3227.401505	-1.441701516	0.271248148	-5.315064909	1.06619E-07	1.47989E-06	Tprn
ENSMUSG0C 711.0282666	-2.926728166	0.550828809	-5.313317167	1.07647E-07	1.49126E-06	Nr5a2
ENSMUSG0C 11862.71033	-2.033859509	0.382828637	-5.312715174	1.08004E-07	1.49431E-06	Gna11
ENSMUSG0C 39.70370484	-2.845229908	0.535653267	-5.311700839	1.08607E-07	1.50004E-06	Nrsn1
ENSMUSG0C 71.92802748	-2.655902698	0.500136172	-5.310359147	1.09409E-07	1.50937E-06	Ky
ENSMUSG0C 90.50452298	-1.344682293	0.253274903	-5.30918096	1.10119E-07	1.51827E-06	Afmid
ENSMUSG0C 90.15960439	-1.917246756	0.361157536	-5.308616231	1.10461E-07	1.5221E-06	Etv1
ENSMUSG0C 19.98504738	-2.709712278	0.510596199	-5.306957399	1.1147E-07	1.53512E-06	Slc6a15
ENSMUSG0C 50.70294545	-2.11153705	0.398132757	-5.303600405	1.13541E-07	1.56273E-06	Cend1
ENSMUSG0C 4257.347202	-1.130365878	0.213153478	-5.303060913	1.13877E-07	1.56645E-06	Cdc42bpb
ENSMUSG0C 156.2494715	-1.308364718	0.246815635	-5.300979898	1.15183E-07	1.5835E-06	Foxp2
ENSMUSG0C 6983.91518	-2.17388583	0.410226344	-5.299235066	1.16289E-07	1.59778E-06	Stk17b
ENSMUSG0C 1099.449115	-1.608644452	0.303701379	-5.296796663	1.17852E-07	1.61832E-06	Sema6a
ENSMUSG0C 7004.749698	-1.765695988	0.33347256	-5.294876407	1.19097E-07	1.63353E-06	Myo5b
ENSMUSG0C 5636.259953	-1.522153111	0.28755707	-5.29339485	1.20066E-07	1.64587E-06	Cdc42se2
ENSMUSG0C 14668.81796	-2.094653576	0.395884806	-5.291068379	1.21604E-07	1.66412E-06	Serpinb6a

ENSMUSG0C 7279.46201	-1.412851075	0.267361721	-5.284417935	1.26105E-07	1.7217E-06	Lad1
ENSMUSG0C 1484.557521	-1.207984105	0.228996794	-5.275113623	1.32674E-07	1.80309E-06	Plgrkt
ENSMUSG0C 75.87746604	-2.28663339	0.433768209	-5.271555971	1.35272E-07	1.83735E-06	Rgs13
ENSMUSG0C 393.3078089	-2.217183349	0.420608459	-5.27137128	1.35408E-07	1.83815E-06	Zswim5
ENSMUSG0C 1184.781288	-1.351758894	0.256659259	-5.266745092	1.38864E-07	1.87862E-06	Tbc1d23
ENSMUSG0C 3259.710609	-2.208599556	0.419556673	-5.264126866	1.40857E-07	1.9045E-06	Ms4a8a
ENSMUSG0C 955.9255417	-2.359621825	0.448292351	-5.26357815	1.41278E-07	1.90802E-06	Adtrp
ENSMUSG0C 204.9583545	-2.373910561	0.451118284	-5.262279639	1.4228E-07	1.92046E-06	Cfb
ENSMUSG0C 3204.91696	-1.740112616	0.330716214	-5.26164894	1.42769E-07	1.92597E-06	Tspan15
ENSMUSG0C 1743.079402	-2.189807002	0.416398005	-5.2589277	1.44898E-07	1.95246E-06	Fam213b
ENSMUSG0C 13.12142305	-2.749801541	0.522880916	-5.258944167	1.44885E-07	1.95246E-06	Spock1
ENSMUSG0C 686.8002426	-3.079251869	0.585564857	-5.258600878	1.45156E-07	1.95372E-06	Ptk6
ENSMUSG0C 173.0828112	-2.275923385	0.432825399	-5.258294425	1.45398E-07	1.95587E-06	Col6a5
ENSMUSG0C 1556.066261	-1.572987987	0.299201282	-5.257290266	1.46193E-07	1.96546E-06	Arhgap18
ENSMUSG0C 24.8537759	-2.702359136	0.514240938	-5.255044737	1.47988E-07	1.98847E-06	NA
ENSMUSG0C 38884.46134	-1.500254349	0.285582188	-5.253319047	1.49382E-07	2.00607E-06	Calm1
ENSMUSG0C 469.7356847	-2.216851165	0.422014738	-5.253018356	1.49627E-07	2.00821E-06	Cutal
ENSMUSG0C 1340.303842	-1.057019489	0.201268514	-5.251787623	1.5063E-07	2.02054E-06	Syne2
ENSMUSG0C 118.5995869	-2.470253821	0.470826699	-5.246630715	1.54906E-07	2.07386E-06	Syt17
ENSMUSG0C 353.9215924	-2.016825076	0.3849173	-5.239632195	1.60897E-07	2.14614E-06	Ptpn22
ENSMUSG0C 252.6771825	-1.15369375	0.220191505	-5.239501625	1.61011E-07	2.14645E-06	Arid3b
ENSMUSG0C 7536.497727	-2.105324986	0.401887809	-5.238588831	1.61809E-07	2.15253E-06	Mxd1
ENSMUSG0C 51.28661193	-2.487732649	0.474868627	-5.238780809	1.61641E-07	2.15253E-06	Chodl
ENSMUSG0C 40.10010244	-1.977068055	0.377398937	-5.238668847	1.61739E-07	2.15253E-06	Slc18a2
ENSMUSG0C 35.40233331	-2.66268212	0.508284583	-5.238565581	1.61829E-07	2.15253E-06	Olfir943
ENSMUSG0C 2455.306574	-0.88465818	0.168898564	-5.237807577	1.62495E-07	2.15897E-06	Smarcc2
ENSMUSG0C 1493.695111	-2.112341316	0.403360789	-5.236853399	1.63337E-07	2.16773E-06	Mtmr11
ENSMUSG0C 1810.578737	-2.159454385	0.412488828	-5.235182721	1.64822E-07	2.18499E-06	Ptprd
ENSMUSG0C 2716.93764	-1.842265317	0.351923855	-5.234840688	1.65127E-07	2.18782E-06	Chdh
ENSMUSG0C 4862.849499	-1.657124784	0.316615879	-5.23386505	1.66002E-07	2.19818E-06	Sqrdl
ENSMUSG0C 88.79193417	-2.176545654	0.41615135	-5.23017804	1.69347E-07	2.23624E-06	Zcchc18
ENSMUSG0C 1206.983029	-0.985309353	0.188399585	-5.229891315	1.6961E-07	2.23847E-06	Nacc2
ENSMUSG0C 84.73278419	-2.201637809	0.421230098	-5.226686832	1.72574E-07	2.27381E-06	Mchr1
ENSMUSG0C 8037.814944	-1.323555628	0.253269812	-5.225872033	1.73336E-07	2.28258E-06	Mapk13
ENSMUSG0C 604.7076746	-1.302842853	0.249349059	-5.224976022	1.74178E-07	2.29239E-06	Tec
ENSMUSG0C 463.3403	-1.504175273	0.287996266	-5.222898531	1.76144E-07	2.3157E-06	Map3k13
ENSMUSG0C 1279.847429	-2.227745793	0.426659896	-5.221362065	1.77612E-07	2.33371E-06	Apol7a
ENSMUSG0C 1692.369705	-1.187669866	0.227502356	-5.220472825	1.78467E-07	2.33977E-06	Ap1ar
ENSMUSG0C 13.74036067	-3.147313967	0.602870596	-5.220546475	1.78396E-07	2.33977E-06	4930568G15Rik
ENSMUSG0C 54.80822394	-2.405678863	0.461226551	-5.215829093	1.82997E-07	2.39783E-06	Ffar1
ENSMUSG0C 1089.623769	-1.398377979	0.268120247	-5.215488176	1.83334E-07	2.40092E-06	Fam132a
ENSMUSG0C 3053.369901	-1.130405497	0.216752144	-5.215198685	1.8362E-07	2.40335E-06	March8
ENSMUSG0C 2968.204581	-1.338966227	0.256791025	-5.214225174	1.84587E-07	2.41339E-06	Ano9
ENSMUSG0C 1842.204443	-1.378500394	0.264492762	-5.211864331	1.86952E-07	2.43622E-06	Lrrc1
ENSMUSG0C 1499.646509	-1.858291163	0.356806015	-5.20812734	1.90756E-07	2.48443E-06	Slc35d1
ENSMUSG0C 20.15991275	-3.070992769	0.590572519	-5.200026534	1.9926E-07	2.58668E-06	Sstr1
ENSMUSG0C 1147.586603	-1.292433349	0.248571351	-5.199446128	1.99883E-07	2.59335E-06	Abcb10
ENSMUSG0C 263.4695982	-2.125216154	0.408903607	-5.197352422	2.02147E-07	2.61986E-06	Art3
ENSMUSG0C 48.7163697	-3.156309851	0.607619607	-5.194549045	2.05217E-07	2.65675E-06	Dpf3
ENSMUSG0C 873.0113304	-1.356236033	0.261098855	-5.194339263	2.05448E-07	2.65829E-06	Sytl2
ENSMUSG0C 1117.546962	-2.164801185	0.416897713	-5.192643468	2.07329E-07	2.67971E-06	Adamts15
ENSMUSG0C 13.58081763	-2.703954742	0.520827539	-5.191650859	2.08438E-07	2.69257E-06	Rprml
ENSMUSG0C 49.31767829	-2.030833879	0.39150232	-5.187284399	2.13383E-07	2.75197E-06	Sspo
ENSMUSG0C 24.41457747	-3.426551242	0.661659097	-5.178726108	2.23406E-07	2.87499E-06	Sypl2
ENSMUSG0C 20.40191957	-2.768797709	0.535210518	-5.173287177	2.30011E-07	2.95359E-06	Ntf3
ENSMUSG0C 807.2237544	-1.620883566	0.313360508	-5.172584052	2.30879E-07	2.96313E-06	Tmem243
ENSMUSG0C 432.9702715	-3.876784259	0.749800608	-5.170420266	2.33568E-07	2.99603E-06	Gcg
ENSMUSG0C 1064.2538	-3.395310112	0.656838689	-5.169168881	2.35137E-07	3.01124E-06	Mettl7b
ENSMUSG0C 13.80811789	-2.699057879	0.522155353	-5.169070593	2.35261E-07	3.01124E-06	Phactr3
ENSMUSG0C 30.38774606	-1.825991857	0.353252716	-5.169080876	2.35248E-07	3.01124E-06	NA
ENSMUSG0C 3203.989305	-2.786172263	0.539109042	-5.168105236	2.36479E-07	3.0252E-06	Susd2
ENSMUSG0C 1375.905042	-2.163962216	0.418727445	-5.16794932	2.36676E-07	3.0261E-06	Dqx1
ENSMUSG0C 1008.87732	-1.194109261	0.231110842	-5.166824942	2.38104E-07	3.04271E-06	Kif16b
ENSMUSG0C 29037.75618	-1.453676495	0.281466685	-5.164648506	2.40891E-07	3.07667E-06	Atp1b1
ENSMUSG0C 1615.2212	-0.858091548	0.166284796	-5.160372854	2.46458E-07	3.14363E-06	Svil
ENSMUSG0C 12.06310564	-2.970260055	0.575865561	-5.157905345	2.49728E-07	3.17928E-06	NA
ENSMUSG0C 350.8133099	-2.568464634	0.497995527	-5.157605836	2.50127E-07	3.18266E-06	Plscr4

ENSMUSG0C 3808.812642	-3.306685873	0.641441281	-5.155087415	2.53513E-07	3.22228E-06	NA
ENSMUSG0C 290.239116	-3.088680551	0.599257691	-5.154177573	2.54746E-07	3.23278E-06	Hes2
ENSMUSG0C 14.03685226	-3.665763183	0.711247593	-5.153990283	2.55001E-07	3.23428E-06	Zyg11a
ENSMUSG0C 1197.52488	-3.871549472	0.751218105	-5.153695638	2.55402E-07	3.23764E-06	Slc25a48
ENSMUSG0C 10.24559012	-3.495369721	0.678524194	-5.151429754	2.58508E-07	3.27526E-06	Rnf212
ENSMUSG0C 1465.939392	-1.236984951	0.240148393	-5.150919131	2.59213E-07	3.28244E-06	NA
ENSMUSG0C 202.4615774	-1.031333618	0.200342498	-5.147852452	2.63486E-07	3.33299E-06	Zfp729b
ENSMUSG0C 3117.601604	-2.089012946	0.405887012	-5.146784417	2.6499E-07	3.35024E-06	Slc9a2
ENSMUSG0C 1535.311649	-1.015392664	0.197374699	-5.144492518	2.68245E-07	3.38959E-06	Gas2l1
ENSMUSG0C 3147.826292	-1.246027151	0.242250587	-5.143546466	2.696E-07	3.4049E-06	Gtpbp2
ENSMUSG0C 11.17281281	-3.02539005	0.588379533	-5.141902263	2.71971E-07	3.43301E-06	Omg
ENSMUSG0C 939.0528033	-0.949315239	0.18463875	-5.14147349	2.72592E-07	3.43903E-06	Exoc3
ENSMUSG0C 1404.399478	-1.31727783	0.256319573	-5.139201083	2.75909E-07	3.47413E-06	Etv3
ENSMUSG0C 1473.460879	-1.554230945	0.302497123	-5.138002409	2.77674E-07	3.49387E-06	Cry2
ENSMUSG0C 2030.396545	-1.564661254	0.305114171	-5.12811729	2.92654E-07	3.66876E-06	Aim1
ENSMUSG0C 96.7776899	-3.122292606	0.609366185	-5.123836348	2.99381E-07	3.74715E-06	Ctnx3
ENSMUSG0C 55.99212773	-3.001227084	0.585809194	-5.123216082	3.00368E-07	3.75752E-06	NA
ENSMUSG0C 29.092036	-2.413294816	0.471181649	-5.121792878	3.02644E-07	3.78202E-06	NA
ENSMUSG0C 2947.557274	-1.654150849	0.323187559	-5.118238008	3.08403E-07	3.85196E-06	Plekhh1
ENSMUSG0C 111.0136761	-2.68221407	0.524380535	-5.115014556	3.13717E-07	3.91627E-06	Slc6a20b
ENSMUSG0C 3212.462248	-0.922225878	0.180478101	-5.109904601	3.22322E-07	4.01735E-06	Tax1bp3
ENSMUSG0C 1228.830897	-1.798427595	0.352082508	-5.107972004	3.25635E-07	4.05652E-06	Rhod
ENSMUSG0C 1132.172383	-1.514026578	0.296555931	-5.105366034	3.30155E-07	4.10637E-06	Gnpda1
ENSMUSG0C 1474.650405	-1.890747419	0.370426436	-5.104245363	3.32117E-07	4.12861E-06	Lclat1
ENSMUSG0C 9029.639435	-1.38575641	0.271665856	-5.100959063	3.37937E-07	4.19437E-06	Mgat4a
ENSMUSG0C 2080.736301	-1.334159004	0.261632556	-5.099361574	3.40801E-07	4.22598E-06	Synpo
ENSMUSG0C 3481.014607	-2.845253793	0.557965085	-5.099340213	3.40839E-07	4.22598E-06	Defa30
ENSMUSG0C 166.4845382	-1.555827037	0.30529175	-5.096197442	3.46544E-07	4.28999E-06	Tspyl4
ENSMUSG0C 38.04997092	-2.254886706	0.442855225	-5.091701707	3.54864E-07	4.38385E-06	Tmem229a
ENSMUSG0C 1179.515711	-1.858888791	0.365500573	-5.085871077	3.65943E-07	4.51133E-06	Slc35f2
ENSMUSG0C 2035.773297	-1.97720547	0.388832347	-5.084981962	3.67661E-07	4.53016E-06	Rab4a
ENSMUSG0C 59.27026956	-2.139294736	0.420863793	-5.083104726	3.71315E-07	4.56837E-06	Ccr9
ENSMUSG0C 4700.224466	-1.468271986	0.288926658	-5.081815557	3.73844E-07	4.59444E-06	Atp6v0a2
ENSMUSG0C 27.9593962	-2.489345532	0.489881216	-5.081528846	3.74409E-07	4.59662E-06	Gfap
ENSMUSG0C 44.37171106	-2.627200364	0.517006693	-5.081559673	3.74348E-07	4.59662E-06	Tgm5
ENSMUSG0C 401.4062314	-0.720765958	0.141895649	-5.079549391	3.78331E-07	4.63998E-06	Tbck
ENSMUSG0C 10794.77533	-1.891319495	0.372626483	-5.075644328	3.86185E-07	4.73141E-06	Dsp
ENSMUSG0C 8072.904753	-1.106761585	0.218150248	-5.073391362	3.90788E-07	4.77795E-06	Plekhh2
ENSMUSG0C 79.70506106	-2.556842947	0.504008912	-5.073011384	3.91569E-07	4.78504E-06	NA
ENSMUSG0C 88.26665753	-1.915557766	0.377648477	-5.072330174	3.92974E-07	4.79974E-06	Mamdc2
ENSMUSG0C 40.69730744	-3.37354239	0.665209976	-5.071394766	3.94911E-07	4.81844E-06	Pglyrp2
ENSMUSG0C 1026.878762	-2.077755636	0.409822361	-5.069893284	3.98039E-07	4.85162E-06	DennD5b
ENSMUSG0C 2439.658983	-0.776495518	0.153213383	-5.068065862	4.01878E-07	4.8934E-06	Pip4k2c
ENSMUSG0C 578.0245105	-2.162933278	0.427153067	-5.063602364	4.11407E-07	5.0043E-06	Il15
ENSMUSG0C 952.0776784	-2.09145131	0.413064531	-5.063255621	4.12157E-07	5.01085E-06	Cyp2d22
ENSMUSG0C 72.03821317	-2.176764567	0.430049368	-5.061662051	4.15617E-07	5.05033E-06	NA
ENSMUSG0C 6744.366326	-0.944728942	0.186705822	-5.059986519	4.19286E-07	5.09231E-06	Tor1aip2
ENSMUSG0C 218.4490507	-1.364750897	0.269916806	-5.056190905	4.27713E-07	5.18406E-06	Ttll3
ENSMUSG0C 838.8114933	-1.24164475	0.245619639	-5.055152576	4.30047E-07	5.20969E-06	Snx15
ENSMUSG0C 709.5684205	-1.572577919	0.311585429	-5.047020092	4.48754E-07	5.42801E-06	Cpm
ENSMUSG0C 675.9626191	-3.130930846	0.620478156	-5.045996894	4.51163E-07	5.45436E-06	Scg2
ENSMUSG0C 4384.801388	-3.5532123	0.704397157	-5.044330838	4.55111E-07	5.49371E-06	Pdzk1
ENSMUSG0C 6511.272016	-1.374243374	0.272499469	-5.043104783	4.58038E-07	5.52624E-06	Hadha
ENSMUSG0C 749.5067401	-1.272308873	0.25234698	-5.041902516	4.60926E-07	5.55825E-06	Mapre3
ENSMUSG0C 22.67746398	-2.128976449	0.4222705	-5.041736159	4.61327E-07	5.56027E-06	Trim63
ENSMUSG0C 111.1084918	-2.189674082	0.434420494	-5.040448396	4.64442E-07	5.59214E-06	Msc
ENSMUSG0C 17.23393453	-4.962223177	0.984796936	-5.038828813	4.68389E-07	5.63681E-06	NA
ENSMUSG0C 2910.639926	-0.946121992	0.187890891	-5.035486221	4.76637E-07	5.72447E-06	Rnpepl1
ENSMUSG0C 116.5469802	-1.485398445	0.29507078	-5.03404114	4.80247E-07	5.76199E-06	Id4
ENSMUSG0C 8.561193029	-3.50731445	0.697023396	-5.031846093	4.85779E-07	5.82543E-06	Kcnp4
ENSMUSG0C 61.22355092	-1.923895644	0.382400054	-5.031107141	4.87656E-07	5.83908E-06	Kbtbd13
ENSMUSG0C 2194.724979	-1.094137189	0.217503712	-5.030429966	4.89381E-07	5.85679E-06	Fam160a2
ENSMUSG0C 40.12692376	-2.546307281	0.506298052	-5.029265406	4.92362E-07	5.88951E-06	Cd96
ENSMUSG0C 816.5071065	-2.475100401	0.492159033	-5.029066289	4.92874E-07	5.89266E-06	Tmem86b
ENSMUSG0C 35.66435437	-2.226260621	0.442776803	-5.02795225	4.95745E-07	5.91805E-06	Pcdh10
ENSMUSG0C 7818.649581	-2.705851443	0.53833427	-5.026340686	4.99927E-07	5.96498E-06	Mpp1
ENSMUSG0C 2125.63137	-1.665192149	0.331385949	-5.024932879	5.03609E-07	6.00084E-06	Ksr1

ENSMUSG0C 1882.39762	-1.627310606	0.323849249	-5.024901592	5.03691E-07	6.00084E-06	Casp1
ENSMUSG0C 718.3544593	-3.071357893	0.611585478	-5.021960136	5.11468E-07	6.09044E-06	A1cf
ENSMUSG0C 1944.643737	-2.550157956	0.508516987	-5.014892365	5.30632E-07	6.30915E-06	Kcnk5
ENSMUSG0C 2907.292684	-2.363488449	0.471596389	-5.011676308	5.39579E-07	6.41233E-06	Sult2b1
ENSMUSG0C 5165.827999	-0.776404682	0.154940149	-5.010997404	5.41486E-07	6.43178E-06	Clptm1
ENSMUSG0C 367.9839903	-1.888317045	0.377250337	-5.005474771	5.57245E-07	6.60575E-06	Slc41a3
ENSMUSG0C 2601.735791	-1.107153869	0.221230124	-5.004534873	5.59971E-07	6.63475E-06	Nsd1
ENSMUSG0C 38.99148716	-1.58684984	0.317110174	-5.004096279	5.61247E-07	6.64655E-06	NA
ENSMUSG0C 5382.625278	-1.066506753	0.213206681	-5.00222013	5.66738E-07	6.70824E-06	Mapk1ip1l
ENSMUSG0C 6362.968286	-1.448049645	0.289602809	-5.000122928	5.72938E-07	6.77824E-06	Pgrmc1
ENSMUSG0C 248.8156363	-2.242698618	0.448694931	-4.99827046	5.78468E-07	6.84026E-06	NA
ENSMUSG0C 146.133169	-2.068607619	0.414178143	-4.994487653	5.89922E-07	6.9662E-06	Filip1
ENSMUSG0C 32.06801292	-1.761225318	0.352953225	-4.989968055	6.03893E-07	7.11964E-06	Sgcd
ENSMUSG0C 592.2414413	-1.697820579	0.340320558	-4.988886326	6.07284E-07	7.15607E-06	Mfsd6l
ENSMUSG0C 1477.393782	-2.877703733	0.576934775	-4.987918666	6.10333E-07	7.18843E-06	Hsd17b2
ENSMUSG0C 22.81048595	-4.320944928	0.866868518	-4.984544757	6.21079E-07	7.30775E-06	Ccr6
ENSMUSG0C 337.1487691	-1.700492865	0.341333211	-4.981914481	6.29583E-07	7.39682E-06	Thrb
ENSMUSG0C 60.93080695	-2.093947012	0.420405561	-4.980778574	6.3329E-07	7.43302E-06	9330158H04Rik
ENSMUSG0C 73.81004222	-1.88241697	0.378139341	-4.978104006	6.42102E-07	7.52529E-06	Strip2
ENSMUSG0C 696.0281115	-1.224168286	0.246075548	-4.974766076	6.53265E-07	7.64481E-06	Brd9
ENSMUSG0C 88.24301737	-1.860847054	0.374146708	-4.973575906	6.5729E-07	7.68434E-06	1810034E14Rik
ENSMUSG0C 235.9391828	-1.050504082	0.211321607	-4.971115342	6.65688E-07	7.77487E-06	Igsf9b
ENSMUSG0C 7229.77785	-2.141197387	0.431039761	-4.967517105	6.78156E-07	7.90882E-06	Tpm2
ENSMUSG0C 1227.273155	-1.541511809	0.31052455	-4.964218796	6.89781E-07	8.02864E-06	Cav1
ENSMUSG0C 123.1226404	-2.650374656	0.534561819	-4.958032096	7.12108E-07	8.27229E-06	Hsd3b2
ENSMUSG0C 996.3992928	-3.591508832	0.724499461	-4.957227748	7.15061E-07	8.29848E-06	Akr1c14
ENSMUSG0C 14.512618	-2.807817257	0.566675459	-4.954894755	7.23694E-07	8.37821E-06	Gjc3
ENSMUSG0C 1613.126168	-1.256541257	0.253655688	-4.953727898	7.2805E-07	8.42453E-06	Cep350
ENSMUSG0C 695.13437	-1.112672824	0.224727438	-4.951210386	7.37533E-07	8.52596E-06	Adprm
ENSMUSG0C 35.18098979	-2.269386114	0.458526102	-4.949306275	7.44785E-07	8.60141E-06	NA
ENSMUSG0C 12.53359203	-3.110966094	0.628637342	-4.948745301	7.46934E-07	8.62204E-06	Rspo2
ENSMUSG0C 2192.807363	-0.872529314	0.176356769	-4.947523821	7.51635E-07	8.66788E-06	Gbppl
ENSMUSG0C 7249.705238	-1.342584168	0.271528169	-4.944548382	7.63206E-07	8.77576E-06	Pttg1ip
ENSMUSG0C 8.122076865	-3.417900766	0.691674345	-4.941488417	7.75284E-07	8.89312E-06	Kcng1
ENSMUSG0C 216.4334776	-1.073066742	0.21742929	-4.93524466	8.00503E-07	9.1647E-06	Gm5617
ENSMUSG0C 1149.784444	-3.401058179	0.689671792	-4.931415518	8.16359E-07	9.34172E-06	NA
ENSMUSG0C 23.33637544	-1.789006711	0.362793732	-4.931195208	8.1728E-07	9.34583E-06	Ces2f
ENSMUSG0C 5423.320766	-1.109002365	0.224966595	-4.929631275	8.2385E-07	9.41384E-06	Itgb4
ENSMUSG0C 568.4625647	-2.555987576	0.518550744	-4.929098277	8.261E-07	9.43048E-06	Adcy5
ENSMUSG0C 16171.01296	-1.562494572	0.317181759	-4.92618042	8.38526E-07	9.54024E-06	Cs
ENSMUSG0C 3453.825358	-1.578507384	0.320422024	-4.9263386	8.37848E-07	9.54024E-06	Rnf103
ENSMUSG0C 15057.39626	-3.184079769	0.64659363	-4.924390871	8.46235E-07	9.61874E-06	Aoc1
ENSMUSG0C 1062.842874	-1.531223545	0.310953581	-4.924283353	8.46701E-07	9.61943E-06	Snx25
ENSMUSG0C 691.8308625	-1.392296067	0.282861252	-4.922187324	8.55822E-07	9.71841E-06	Ripk1
ENSMUSG0C 195.2925357	-2.273743481	0.462056857	-4.920917082	8.61396E-07	9.7677E-06	NA
ENSMUSG0C 68.44310261	-2.282859012	0.464043822	-4.919490145	8.67699E-07	9.82979E-06	NA
ENSMUSG0C 1990.829719	-1.613424327	0.32826819	-4.914957875	8.88016E-07	1.00456E-05	Sec24a
ENSMUSG0C 1045.005809	-1.284556166	0.261512209	-4.912031339	9.01376E-07	1.01822E-05	Slc12a6
ENSMUSG0C 881.8599871	-2.339752177	0.47639379	-4.911382618	9.04364E-07	1.02111E-05	Lysmd3
ENSMUSG0C 947.5832402	-1.835094345	0.37371991	-4.910346745	9.09155E-07	1.02603E-05	Tmem150b
ENSMUSG0C 5947.746709	-2.438794468	0.496685664	-4.910136621	9.1013E-07	1.02664E-05	Me2
ENSMUSG0C 479.4780724	-2.481481621	0.505535762	-4.908617371	9.17207E-07	1.03413E-05	Capn9
ENSMUSG0C 1453.781833	-1.244808727	0.253622558	-4.908115184	9.19558E-07	1.03629E-05	4932438A13Rik
ENSMUSG0C 4671.689464	-3.228859698	0.657942239	-4.907512403	9.22388E-07	1.03899E-05	Slc7a9
ENSMUSG0C 2745.335457	-0.845918573	0.172384133	-4.907171896	9.2399E-07	1.0403E-05	Limd1
ENSMUSG0C 4368.432355	-2.056773546	0.419159455	-4.906900033	9.25272E-07	1.04125E-05	Slc7a7
ENSMUSG0C 18.92802783	-2.307564975	0.470450789	-4.905008197	9.34234E-07	1.05034E-05	Ndst4
ENSMUSG0C 3733.882926	-1.563567921	0.318928167	-4.902570808	9.45905E-07	1.06195E-05	Atp11b
ENSMUSG0C 44.36114653	-2.099775665	0.428441028	-4.90096776	9.53657E-07	1.06964E-05	Apc2
ENSMUSG0C 8524.376286	-1.759977433	0.359178199	-4.900011861	9.58309E-07	1.07435E-05	Gng12
ENSMUSG0C 72.47321536	-3.086246261	0.630177083	-4.897426998	9.70997E-07	1.08807E-05	Bves
ENSMUSG0C 403.2579776	-2.278911483	0.465446997	-4.896178297	9.77184E-07	1.09448E-05	Lims2
ENSMUSG0C 268.6546296	-1.426021321	0.291362583	-4.894318643	9.86469E-07	1.10436E-05	Tspan2
ENSMUSG0C 894.2889009	-1.55723021	0.318223861	-4.893505486	9.90556E-07	1.10741E-05	Bmp2
ENSMUSG0C 40.11955601	-2.77527185	0.567134451	-4.893498966	9.90588E-07	1.10741E-05	NA
ENSMUSG0C 6194.357566	-1.745307507	0.35684862	-4.890890447	1.00381E-06	1.12166E-05	Fam102a
ENSMUSG0C 283.7299023	-3.312033878	0.677543536	-4.888296769	1.01712E-06	1.1344E-05	Cndp1



ENSMUSG0C 7.829935765	-4.506513148	0.922087649	-4.887293689	1.02232E-06	1.13966E-05	Trdn
ENSMUSG0C 79.73997724	-2.042401114	0.418094059	-4.885027825	1.03414E-06	1.15176E-05	Gm6086
ENSMUSG0C 25.83081633	-2.008361357	0.411232882	-4.883756732	1.04083E-06	1.15867E-05	Klrk1
ENSMUSG0C 58.17783498	-2.650964958	0.543017477	-4.881914613	1.05061E-06	1.169E-05	Flt3
ENSMUSG0C 38.59504914	-2.002131194	0.410225609	-4.880561213	1.05784E-06	1.17595E-05	NA
ENSMUSG0C 223.9269109	-1.537155013	0.315172424	-4.877187517	1.07609E-06	1.19512E-05	Lpar5
ENSMUSG0C 9.205014631	-3.006213288	0.616400803	-4.87704311	1.07688E-06	1.19544E-05	Vwa5b1
ENSMUSG0C 7047.612944	-1.064529382	0.218283655	-4.876816739	1.07812E-06	1.19573E-05	Pdcd6ip
ENSMUSG0C 24582.8644	-2.567625412	0.52662273	-4.875644869	1.08454E-06	1.20113E-05	Serpnb1a
ENSMUSG0C 4593.473836	-1.20711073	0.24759329	-4.875377393	1.08601E-06	1.2022E-05	Pascin2
ENSMUSG0C 116.859451	-1.875315769	0.38474133	-4.874224891	1.09236E-06	1.20867E-05	Arhgef37
ENSMUSG0C 3828.317529	-1.060560175	0.217622081	-4.873403333	1.09692E-06	1.21267E-05	Llg12
ENSMUSG0C 135.3158639	-2.223764706	0.456307582	-4.87338978	1.09699E-06	1.21267E-05	Erc2
ENSMUSG0C 106964.1873	-2.865442115	0.588032973	-4.872927622	1.09957E-06	1.214E-05	Sepp1
ENSMUSG0C 42.1218705	-1.992388458	0.409343522	-4.867277367	1.13146E-06	1.24786E-05	Adgrb1
ENSMUSG0C 2795.734673	-1.486257634	0.305467602	-4.865516426	1.14158E-06	1.25786E-05	Snx9
ENSMUSG0C 6184.050094	-1.62960828	0.335047746	-4.863809112	1.15148E-06	1.26759E-05	Neurl3
ENSMUSG0C 38.24400881	-2.512215133	0.516761994	-4.861454911	1.16526E-06	1.28098E-05	Mylk3
ENSMUSG0C 1184.073427	-2.209940945	0.454624463	-4.861025145	1.16779E-06	1.28317E-05	Nat8f4
ENSMUSG0C 146.0875592	-1.716630539	0.353182366	-4.860465033	1.1711E-06	1.28621E-05	Sneg
ENSMUSG0C 2958.907871	-3.122489027	0.642791077	-4.857704378	1.18755E-06	1.30246E-05	Slc28a2
ENSMUSG0C 3162.422537	-0.730265286	0.150389685	-4.855820299	1.19889E-06	1.3143E-05	Aph1a
ENSMUSG0C 28.38800912	-2.272006839	0.467934878	-4.855391091	1.20149E-06	1.31606E-05	Nell2
ENSMUSG0C 5508.565296	-1.590781635	0.327657539	-4.855013065	1.20379E-06	1.31784E-05	Pdlim1
ENSMUSG0C 2710.845273	-1.398740015	0.288212289	-4.853158837	1.2151E-06	1.3295E-05	Ilvbl
ENSMUSG0C 126.7689337	-3.414796118	0.703729692	-4.852425806	1.2196E-06	1.33331E-05	1700011H14Rik
ENSMUSG0C 2495.795637	-0.852513739	0.175722753	-4.85147043	1.22549E-06	1.33878E-05	Baz2a
ENSMUSG0C 293.9535533	-1.84452633	0.380221431	-4.851189809	1.22723E-06	1.3398E-05	Gucy1a3
ENSMUSG0C 2973.80135	-1.327938683	0.273975672	-4.846921898	1.25392E-06	1.36643E-05	Zcchc6
ENSMUSG0C 3487.58298	-1.987693219	0.410109088	-4.846742675	1.25505E-06	1.36703E-05	Entpd5
ENSMUSG0C 2169.420916	-0.899931054	0.185721661	-4.845590163	1.26236E-06	1.3731E-05	Brd1
ENSMUSG0C 3693.181297	-1.181777461	0.244034523	-4.842665068	1.28109E-06	1.39221E-05	Tollip
ENSMUSG0C 1931.509422	-2.732974374	0.564427531	-4.842028829	1.2852E-06	1.39476E-05	Slc23a4
ENSMUSG0C 14.46457896	-3.286054943	0.679099475	-4.838841828	1.30598E-06	1.41601E-05	Gas2l2
ENSMUSG0C 1146.536376	-1.656596477	0.342372945	-4.838572976	1.30775E-06	1.41728E-05	Fmn1
ENSMUSG0C 11036.86228	-3.116228612	0.644070868	-4.838331879	1.30933E-06	1.41836E-05	Npc1l1
ENSMUSG0C 11.41378499	-2.755267549	0.569996568	-4.833831821	1.3393E-06	1.45015E-05	Clgn
ENSMUSG0C 24.27606098	-3.111587355	0.643817686	-4.833025595	1.34473E-06	1.45471E-05	2010010A06Rik
ENSMUSG0C 320.1222668	-2.056182255	0.425512079	-4.832253556	1.34996E-06	1.45904E-05	Me3
ENSMUSG0C 217.9312563	-1.975373342	0.408855494	-4.83147071	1.35528E-06	1.46346E-05	Mab21l2
ENSMUSG0C 7924.74143	-1.551289221	0.321135939	-4.830631002	1.36101E-06	1.46831E-05	Gucy2c
ENSMUSG0C 1550.80074	-1.758798048	0.364459574	-4.825769917	1.39463E-06	1.5039E-05	Exoc3l4
ENSMUSG0C 14.8136496	-2.426464764	0.503215058	-4.821924002	1.4218E-06	1.52836E-05	Svop
ENSMUSG0C 2350.794387	-3.204195335	0.664506017	-4.821920727	1.42182E-06	1.52836E-05	NA
ENSMUSG0C 798.543812	-1.739402198	0.36079463	-4.82103128	1.42818E-06	1.5345E-05	Tpk1
ENSMUSG0C 3139.646371	-1.917978894	0.397855425	-4.820793615	1.42988E-06	1.53564E-05	Bach1
ENSMUSG0C 1257.288614	-0.93453837	0.193947582	-4.818510035	1.44634E-06	1.55261E-05	Amdhd2
ENSMUSG0C 15.07339247	-4.756236272	0.987489539	-4.816492817	1.46103E-06	1.56697E-05	Ins15
ENSMUSG0C 2220.123883	-1.379187969	0.286408875	-4.815451233	1.46868E-06	1.57445E-05	Cpt2
ENSMUSG0C 339.4820584	-0.86053178	0.178716808	-4.815057903	1.47157E-06	1.57685E-05	Zfp949
ENSMUSG0C 1201.699305	-1.569831847	0.326067018	-4.814445377	1.47609E-06	1.58098E-05	Igfb3
ENSMUSG0C 742.8985953	-0.890032574	0.184890792	-4.813828564	1.48066E-06	1.58515E-05	Btd
ENSMUSG0C 11.21910524	-3.277664059	0.681021746	-4.812862551	1.48784E-06	1.59069E-05	Fam169a
ENSMUSG0C 1036.670733	-0.822439773	0.170891654	-4.812638613	1.4895E-06	1.59175E-05	Cipc
ENSMUSG0C 33.64563048	-2.243734806	0.466705221	-4.807605965	1.52748E-06	1.62868E-05	Sox10
ENSMUSG0C 1683.071686	-0.863438379	0.17967304	-4.805608995	1.54281E-06	1.64354E-05	Polr3c
ENSMUSG0C 2122.161232	-1.382033812	0.28777907	-4.802412528	1.56765E-06	1.66776E-05	Etfhdh
ENSMUSG0C 101.3761549	-2.711407219	0.564669536	-4.801759344	1.57278E-06	1.67247E-05	Clec3b
ENSMUSG0C 589.0872806	-2.045229205	0.425989662	-4.801124034	1.57778E-06	1.67628E-05	Ntn1
ENSMUSG0C 4250.851467	-0.770804709	0.160629166	-4.79865972	1.59731E-06	1.69552E-05	Ppp6r3
ENSMUSG0C 3619.6978	-1.63509906	0.340861591	-4.796958957	1.61093E-06	1.70692E-05	Sfxn1
ENSMUSG0C 8.573431307	-3.058686377	0.637643979	-4.796856044	1.61175E-06	1.70704E-05	Grik1
ENSMUSG0C 16696.17984	-3.020491657	0.629806093	-4.795907332	1.6194E-06	1.71437E-05	2010109I03Rik
ENSMUSG0C 6187.407475	-2.036494396	0.424701734	-4.795116748	1.6258E-06	1.72038E-05	Srxn1
ENSMUSG0C 365.0135796	-1.939558212	0.404558276	-4.794261608	1.63275E-06	1.72696E-05	Tiam2
ENSMUSG0C 7772.588475	-1.666907912	0.347713052	-4.793918156	1.63555E-06	1.72916E-05	Net1
ENSMUSG0C 31.05858874	-1.616725654	0.337325303	-4.792779072	1.64487E-06	1.73823E-05	9530077C05Rik



ENSMUSG0C 13.2516037	-2.838418729	0.59266342	-4.789259191	1.67398E-06	1.76664E-05	NA
ENSMUSG0C 1788.508179	-1.797166129	0.375308524	-4.788503365	1.6803E-06	1.77252E-05	Agpat9
ENSMUSG0C 37.58909288	-2.264336187	0.472940297	-4.787784423	1.68633E-06	1.77651E-05	Crb2
ENSMUSG0C 4665.309496	-3.452552331	0.721513038	-4.785155842	1.70855E-06	1.79674E-05	Btnl6
ENSMUSG0C 435.4404981	-1.599793059	0.334426498	-4.783691096	1.72105E-06	1.80908E-05	Psd
ENSMUSG0C 7283.20961	-2.874445035	0.601133763	-4.781706186	1.73814E-06	1.82623E-05	Phgr1
ENSMUSG0C 1727.413586	-1.20297312	0.251594591	-4.781394994	1.74083E-06	1.82826E-05	Ptk2b
ENSMUSG0C 7750.928245	-3.640691025	0.76183674	-4.778833617	1.76315E-06	1.84843E-05	Slc13a2
ENSMUSG0C 2205.318662	-1.003024257	0.209886488	-4.77888914	1.76266E-06	1.84843E-05	Bcr
ENSMUSG0C 3719.715854	-0.990237293	0.207232337	-4.778391766	1.76703E-06	1.85168E-05	Ech1
ENSMUSG0C 7867.088069	-1.307193999	0.273612219	-4.777542481	1.77451E-06	1.85869E-05	Lamb3
ENSMUSG0C 2517.306072	-1.947484755	0.40764905	-4.777356293	1.77615E-06	1.85878E-05	Ubxn2a
ENSMUSG0C 80.66552255	-3.202045152	0.670247666	-4.777405894	1.77571E-06	1.85878E-05	NA
ENSMUSG0C 8633.528349	-0.841722927	0.176250743	-4.775712785	1.79072E-06	1.87237E-05	Arf6
ENSMUSG0C 1944.379926	-0.926061313	0.194078386	-4.771583965	1.82783E-06	1.90949E-05	Man2b2
ENSMUSG0C 461.0265398	-1.613279014	0.33858836	-4.76472083	1.89115E-06	1.97131E-05	Ret
ENSMUSG0C 57.05455224	-2.657176535	0.557716379	-4.764386765	1.89429E-06	1.97372E-05	NA
ENSMUSG0C 1156.234791	-0.686664722	0.144202547	-4.761807187	1.91867E-06	1.99741E-05	Synrg
ENSMUSG0C 2253.299842	-3.227003601	0.677685261	-4.761802838	1.91871E-06	1.99741E-05	Slc16a5
ENSMUSG0C 18.75935429	-2.918096394	0.613014896	-4.760237336	1.93365E-06	2.01208E-05	Slc15a5
ENSMUSG0C 80.11946474	-3.380473959	0.710338793	-4.758960079	1.94593E-06	2.02309E-05	Syndig1
ENSMUSG0C 3957.419211	-3.428290887	0.720637333	-4.757304027	1.96196E-06	2.03877E-05	Scin
ENSMUSG0C 11330.49167	-3.026841497	0.636268957	-4.757172988	1.96323E-06	2.03877E-05	Dpep1
ENSMUSG0C 1458.815757	-2.432034451	0.51135897	-4.756021881	1.97445E-06	2.04677E-05	Cth
ENSMUSG0C 441.1776288	-0.849995108	0.178816704	-4.753443545	1.99981E-06	2.06824E-05	Stradb
ENSMUSG0C 8294.908654	-1.106258396	0.233000752	-4.747874797	2.05565E-06	2.12507E-05	Fosl2
ENSMUSG0C 371.3100917	-0.938475304	0.197706462	-4.746811478	2.06648E-06	2.13534E-05	Whrn
ENSMUSG0C 11806.90871	-1.584892581	0.334099755	-4.743770559	2.09776E-06	2.16578E-05	NA
ENSMUSG0C 200.0552971	-1.961736318	0.413614149	-4.742913954	2.10666E-06	2.17307E-05	Cyp2u1
ENSMUSG0C 31.31937073	-1.723174999	0.363413623	-4.741635671	2.12E-06	2.18493E-05	Enkur
ENSMUSG0C 219.3013525	-1.041418015	0.219665118	-4.74093486	2.12734E-06	2.1906E-05	Tbx2
ENSMUSG0C 15.77343274	-3.454388488	0.728667697	-4.740691132	2.1299E-06	2.19229E-05	1700007P06Rik
ENSMUSG0C 1769.647871	-0.611794074	0.129072815	-4.739914241	2.13809E-06	2.19976E-05	Naa60
ENSMUSG0C 755.629071	-1.097400698	0.231536906	-4.739636175	2.14102E-06	2.20087E-05	Pxmp4
ENSMUSG0C 18.38998618	-2.278573403	0.481675861	-4.730511919	2.23954E-06	2.29223E-05	Gsg1l
ENSMUSG0C 14.50265374	-2.1401629	0.453160068	-4.722752626	2.32674E-06	2.37533E-05	B3galt1
ENSMUSG0C 1265.118951	-1.179364509	0.249774678	-4.721713655	2.33866E-06	2.3834E-05	Crebrf
ENSMUSG0C 12.63133345	-2.461862603	0.521410788	-4.721541366	2.34064E-06	2.3844E-05	Sprn
ENSMUSG0C 286.584506	-1.411959778	0.299190788	-4.719262211	2.36702E-06	2.40817E-05	2310007B03Rik
ENSMUSG0C 2490.233278	-1.148921137	0.243520064	-4.717973213	2.38206E-06	2.42037E-05	Camsap3
ENSMUSG0C 738.4855286	-2.054300781	0.435718301	-4.714745232	2.42013E-06	2.4559E-05	Slc18b1
ENSMUSG0C 3166.193556	-0.668730425	0.141847945	-4.71441744	2.42403E-06	2.45881E-05	Ncln
ENSMUSG0C 3790.100001	-1.092170415	0.231711646	-4.713489527	2.4351E-06	2.46793E-05	Tmem98
ENSMUSG0C 1183.125772	-0.871796264	0.185070888	-4.710607242	2.4698E-06	2.49777E-05	Mif4gd
ENSMUSG0C 12910.66575	-3.166861848	0.672515243	-4.708981515	2.48958E-06	2.51563E-05	Guca2a
ENSMUSG0C 92.17390324	-1.321588264	0.280974138	-4.703593983	2.55621E-06	2.57529E-05	Tmem72
ENSMUSG0C 115.4933201	-2.698093166	0.573715099	-4.702844968	2.56561E-06	2.58148E-05	Dtx1
ENSMUSG0C 983.4221319	-1.176030493	0.250083593	-4.702549568	2.56933E-06	2.58412E-05	Ppm1h
ENSMUSG0C 2569.373645	-1.280470534	0.272305556	-4.702329804	2.5721E-06	2.58581E-05	Trappc10
ENSMUSG0C 369.8113428	-1.032858903	0.219679961	-4.701652792	2.58064E-06	2.5933E-05	Dclre1b
ENSMUSG0C 58.19379915	-1.750742374	0.372716066	-4.697254923	2.63681E-06	2.64528E-05	Sybu
ENSMUSG0C 2797.640425	-0.789605485	0.168166856	-4.695369264	2.66126E-06	2.66754E-05	Slc25a51
ENSMUSG0C 3862.210485	-2.132507556	0.454931728	-4.687533154	2.76518E-06	2.76938E-05	Sema4g
ENSMUSG0C 6809.760307	-1.73936604	0.371060581	-4.687552731	2.76491E-06	2.76938E-05	Slc35g1
ENSMUSG0C 17.89490416	-2.86065057	0.610429051	-4.686294935	2.78195E-06	2.785E-05	Ncam2
ENSMUSG0C 498.8452413	-1.581252886	0.33753783	-4.684668638	2.80413E-06	2.80602E-05	Abi3
ENSMUSG0C 327.6529173	-2.422158343	0.517079916	-4.684301724	2.80916E-06	2.80987E-05	Tpsg1
ENSMUSG0C 1730.810728	-0.977030414	0.208718568	-4.681090056	2.85354E-06	2.85185E-05	Erap1
ENSMUSG0C 22.07409555	-2.059960698	0.440163271	-4.679992254	2.86886E-06	2.86596E-05	Cpne4
ENSMUSG0C 1782.07469	-1.489318638	0.318336729	-4.678437955	2.89069E-06	2.88171E-05	Kif13a
ENSMUSG0C 9.497728477	-2.919864485	0.624145119	-4.678182038	2.8943E-06	2.88381E-05	Pdzrn4
ENSMUSG0C 2692.751944	-1.523706456	0.325732024	-4.677791392	2.89981E-06	2.88717E-05	Mlx
ENSMUSG0C 1672.836216	-2.782475218	0.594965651	-4.676698922	2.9153E-06	2.90016E-05	Ceacam18
ENSMUSG0C 101.1708242	-1.614953399	0.34536991	-4.676010712	2.92509E-06	2.90869E-05	Il7
ENSMUSG0C 4687.610626	-1.285686688	0.274998163	-4.675255556	2.93588E-06	2.91819E-05	Fuca2
ENSMUSG0C 1718.186755	-1.784024983	0.38172794	-4.673550965	2.96036E-06	2.94007E-05	Camk1d
ENSMUSG0C 30.60549141	-2.623719631	0.561428924	-4.67328903	2.96414E-06	2.94259E-05	Amph

ENSMUSG0C 441.3484596	-2.578284989	0.551787675	-4.672603437	2.97406E-06	2.9512E-05	B4galnt3
ENSMUSG0C 598.6878382	-1.861092383	0.39832578	-4.672287047	2.97864E-06	2.95334E-05	Tstd3
ENSMUSG0C 1248.910425	-2.262334225	0.484203174	-4.672282929	2.9787E-06	2.95334E-05	Hepacam2
ENSMUSG0C 4957.130634	-1.071587199	0.229357673	-4.672122737	2.98103E-06	2.95372E-05	Tnfaip1
ENSMUSG0C 3888.345647	-2.414971162	0.516893658	-4.672085112	2.98157E-06	2.95372E-05	Slco2a1
ENSMUSG0C 2298.198507	-1.197040082	0.256233843	-4.671670491	2.9876E-06	2.95846E-05	Rassf7
ENSMUSG0C 1718.915034	-1.593383494	0.341145368	-4.670687754	3.00193E-06	2.97141E-05	Slc30a1
ENSMUSG0C 25.3580257	-1.869857582	0.4004704	-4.669153026	3.02444E-06	2.9912E-05	Hepacam
ENSMUSG0C 385.4049366	-2.961973015	0.634464018	-4.668464924	3.03459E-06	2.99874E-05	Slc10a5
ENSMUSG0C 10.44001822	-2.873951113	0.615698005	-4.667793449	3.04452E-06	3.0073E-05	Sncb
ENSMUSG0C 6.477166267	-4.327015399	0.927235933	-4.666574327	3.06263E-06	3.02393E-05	Kcna1
ENSMUSG0C 8.019429878	-3.55788453	0.76256069	-4.665706711	3.07558E-06	3.03533E-05	Ces1b
ENSMUSG0C 562.8164326	-2.097451457	0.449824305	-4.662823762	3.119E-06	3.07448E-05	Gpr160
ENSMUSG0C 32.84899912	-2.563194421	0.549756414	-4.662418405	3.12515E-06	3.07926E-05	NA
ENSMUSG0C 39.15903451	-1.92161472	0.41231194	-4.660584707	3.15312E-06	3.10297E-05	Raver2
ENSMUSG0C 414.224269	-1.972213203	0.423220862	-4.66000942	3.16195E-06	3.10908E-05	NA
ENSMUSG0C 649.4818034	-3.200227672	0.687354075	-4.65586484	3.22624E-06	3.16704E-05	Ppara
ENSMUSG0C 455.0618848	-0.994021981	0.213588327	-4.653915283	3.25691E-06	3.19451E-05	Kdm1b
ENSMUSG0C 2829.363466	-1.235487529	0.265491701	-4.653582488	3.26217E-06	3.19835E-05	Aldh16a1
ENSMUSG0C 123.2754495	-1.47157192	0.31623675	-4.653386814	3.26527E-06	3.20007E-05	Qpct
ENSMUSG0C 4812.717477	-1.588778529	0.341541078	-4.651793389	3.29061E-06	3.22224E-05	Camk2d
ENSMUSG0C 5564.339916	-1.417704969	0.304785794	-4.651479817	3.29562E-06	3.22335E-05	Plin3
ENSMUSG0C 5257.325054	-2.343687503	0.50385288	-4.651531421	3.29479E-06	3.22335E-05	Sectm1b
ENSMUSG0C 43.87895435	-2.451816709	0.527105992	-4.651468103	3.2958E-06	3.22335E-05	NA
ENSMUSG0C 1829.520174	-1.223508748	0.263104589	-4.650275208	3.31492E-06	3.24071E-05	Kdm7a
ENSMUSG0C 4200.002056	-1.683817846	0.362249137	-4.648231495	3.34793E-06	3.27163E-05	Esrra
ENSMUSG0C 14.35042153	-2.624133418	0.564728411	-4.646717553	3.37258E-06	3.29166E-05	Ctnna3
ENSMUSG0C 303.960516	-2.856912983	0.61485263	-4.646500388	3.37613E-06	3.29365E-05	Lrat
ENSMUSG0C 6095.236821	-1.069812398	0.230244277	-4.646423415	3.37739E-06	3.29365E-05	Slc44a1
ENSMUSG0C 4127.146315	-1.042166843	0.224316318	-4.645969821	3.38482E-06	3.29954E-05	Waf2
ENSMUSG0C 601.6472577	-4.497791175	0.968224696	-4.645400178	3.39418E-06	3.306E-05	Hoxb9
ENSMUSG0C 1993.643064	-1.875877844	0.403814333	-4.645396887	3.39423E-06	3.306E-05	Pdk2
ENSMUSG0C 7848.538821	-1.648856896	0.354957523	-4.645223125	3.39709E-06	3.30608E-05	Tspan3
ENSMUSG0C 526.8100336	-1.218290911	0.262265306	-4.645261436	3.39646E-06	3.30608E-05	Fam126b
ENSMUSG0C 922.810682	-0.757139018	0.163152279	-4.640689204	3.47249E-06	3.37807E-05	Supt20
ENSMUSG0C 17.70815865	-2.370657688	0.511014485	-4.639120335	3.49895E-06	3.40242E-05	Dsg4
ENSMUSG0C 1964.869091	-1.100094281	0.237249912	-4.636858542	3.53744E-06	3.43703E-05	Dock5
ENSMUSG0C 1666.630301	-0.949963387	0.204917623	-4.635830606	3.55507E-06	3.45275E-05	Dnajc13
ENSMUSG0C 13.68039374	-2.113341938	0.455929844	-4.635234926	3.56532E-06	3.45988E-05	Kcnc4
ENSMUSG0C 1345.690517	-1.474577774	0.318183156	-4.634367805	3.5803E-06	3.47299E-05	Isoc1
ENSMUSG0C 1600.216181	-1.911135558	0.412460874	-4.63349539	3.59543E-06	3.48482E-05	Abcd1
ENSMUSG0C 292.3659557	-1.716093913	0.370554838	-4.631146962	3.63646E-06	3.52171E-05	Ccdc116
ENSMUSG0C 995.7386085	-2.988993726	0.645610597	-4.629716021	3.66168E-06	3.54469E-05	Btnl4
ENSMUSG0C 591.8916594	-1.028368451	0.222257537	-4.626922742	3.71139E-06	3.58989E-05	Zhx3
ENSMUSG0C 279.6597558	-3.363357333	0.727692162	-4.621950749	3.80148E-06	3.67554E-05	Hhip
ENSMUSG0C 64.42870862	-2.162785679	0.467955908	-4.621772355	3.80475E-06	3.67721E-05	Dclk3
ENSMUSG0C 1441.540084	-1.484335819	0.321188475	-4.62138568	3.81185E-06	3.68257E-05	Carmil1
ENSMUSG0C 12756.96253	-0.776247288	0.168040152	-4.619415523	3.84823E-06	3.71318E-05	Nucb1
ENSMUSG0C 1677.950774	-1.317962994	0.285340906	-4.618906595	3.85767E-06	3.71927E-05	Arhgap5
ENSMUSG0C 4700.159205	-1.601804827	0.346833902	-4.618362905	3.86779E-06	3.72752E-05	Pank3
ENSMUSG0C 8065.633773	-1.478530519	0.32021131	-4.617358832	3.88655E-06	3.74104E-05	Prss32
ENSMUSG0C 106.091882	-1.320397913	0.285984834	-4.617020756	3.89288E-06	3.74562E-05	Macrod2
ENSMUSG0C 564.4533619	-1.114878948	0.241504248	-4.616394778	3.90464E-06	3.75389E-05	Abcd4
ENSMUSG0C 135.1722781	-2.026525849	0.439179123	-4.614349231	3.94329E-06	3.78645E-05	C6
ENSMUSG0C 24.14453999	-2.042644498	0.442716373	-4.613889665	3.95202E-06	3.7933E-05	Ctnnd2
ENSMUSG0C 481.2738962	-2.25510091	0.488800269	-4.613542696	3.95863E-06	3.79811E-05	Tcea3
ENSMUSG0C 3427.654346	-0.828062139	0.179493857	-4.613317439	3.96292E-06	3.79923E-05	Erlin2
ENSMUSG0C 2914.053067	-1.612985438	0.349739656	-4.611960387	3.98889E-06	3.82125E-05	Unc5b
ENSMUSG0C 7743.174726	-1.715569277	0.371983865	-4.611945399	3.98918E-06	3.82125E-05	Glrx
ENSMUSG0C 33.76928388	-2.314422938	0.50184767	-4.611803692	3.9919E-06	3.82231E-05	Kcnt1
ENSMUSG0C 75097.25133	-1.867061496	0.405052345	-4.609432632	4.03769E-06	3.85838E-05	Atp1a1
ENSMUSG0C 736.5106478	-1.4160256	0.307285425	-4.60817691	4.06215E-06	3.87863E-05	Tmem170
ENSMUSG0C 265.1816448	-1.856017317	0.402836178	-4.60737496	4.07784E-06	3.89205E-05	Pyroxd2
ENSMUSG0C 781.4949004	-1.63907134	0.355925435	-4.605097531	4.12273E-06	3.93016E-05	Ankrd9
ENSMUSG0C 93.66460356	-1.671437527	0.362980098	-4.604763558	4.12935E-06	3.93489E-05	NA
ENSMUSG0C 84.71477181	-1.972347889	0.428424106	-4.603727621	4.14995E-06	3.94977E-05	Nrxn2
ENSMUSG0C 601.9003806	-0.802093846	0.174232923	-4.603572236	4.15305E-06	3.94987E-05	Ppm1l

ENSMUSG0C 4006.653615	-2.092353161	0.454814062	-4.600458373	4.21562E-06	3.99786E-05	Cry11
ENSMUSG0C 225.6316502	-2.940118034	0.639228927	-4.599475885	4.23555E-06	4.01515E-05	NA
ENSMUSG0C 31492.36594	-2.725107897	0.592545563	-4.59898456	4.24555E-06	4.02143E-05	Myo1a
ENSMUSG0C 2926.93898	-0.789505383	0.171686268	-4.598535395	4.25471E-06	4.0285E-05	1700020I14Rik
ENSMUSG0C 9536.323903	-1.189526457	0.258788269	-4.596523871	4.29598E-06	4.06433E-05	NA
ENSMUSG0C 3045.745967	-1.279377465	0.278434203	-4.594900516	4.32956E-06	4.09447E-05	Cltb
ENSMUSG0C 722.5196539	-1.523516904	0.331676759	-4.593378525	4.36127E-06	4.12117E-05	Mfsd9
ENSMUSG0C 6627.670125	-2.052428547	0.447017914	-4.591378737	4.40327E-06	4.15921E-05	Atp2b1
ENSMUSG0C 1045.112265	-1.215148484	0.264686412	-4.590898628	4.41342E-06	4.16548E-05	Inpp4a
ENSMUSG0C 146.2592549	-1.481743018	0.322855206	-4.589497059	4.44315E-06	4.19188E-05	Madcam1
ENSMUSG0C 131.3271587	-2.329915627	0.507671669	-4.58941432	4.44491E-06	4.19188E-05	Hrh1
ENSMUSG0C 414.1708006	-2.275111198	0.495947114	-4.587406874	4.48786E-06	4.22566E-05	Fendrr
ENSMUSG0C 570.8045851	-2.439146072	0.531900424	-4.585719358	4.52426E-06	4.25488E-05	NA
ENSMUSG0C 8454.979122	-0.930644296	0.202951553	-4.585549017	4.52795E-06	4.25667E-05	Jup
ENSMUSG0C 4133.481275	-1.226926586	0.267686038	-4.583453798	4.57358E-06	4.29446E-05	Wwc1
ENSMUSG0C 2204.59895	-0.947831855	0.206792756	-4.583486738	4.57286E-06	4.29446E-05	Foxo3
ENSMUSG0C 1062.612405	-0.818995202	0.178701545	-4.583033705	4.58278E-06	4.3014E-05	Ppip5k1
ENSMUSG0C 106.1120822	-2.422746059	0.5288328	-4.58130823	4.62076E-06	4.33363E-05	Krt12
ENSMUSG0C 18.71383973	-1.955527502	0.426962611	-4.580090738	4.64774E-06	4.35721E-05	Cysltr2
ENSMUSG0C 10.49746098	-3.584205333	0.782969731	-4.577706126	4.70102E-06	4.40195E-05	NA
ENSMUSG0C 837.0551154	-1.9910663	0.435077623	-4.576347282	4.73165E-06	4.42714E-05	Lrig3
ENSMUSG0C 766.7853862	-0.86475655	0.189018727	-4.574978169	4.7627E-06	4.45093E-05	Ctso
ENSMUSG0C 794.4069585	-1.113505213	0.243404427	-4.574712251	4.76875E-06	4.45483E-05	0610030E20Rik
ENSMUSG0C 2136.196315	-2.127542661	0.465077787	-4.574595304	4.77141E-06	4.45557E-05	Pfkfb4
ENSMUSG0C 114.1885678	-1.984077079	0.433936671	-4.572273352	4.82461E-06	4.49994E-05	Adgrg5
ENSMUSG0C 256.8781136	-4.807544235	1.051450342	-4.57229794	4.82404E-06	4.49994E-05	NA
ENSMUSG0C 761.0057208	-1.19212179	0.26080183	-4.570987059	4.85432E-06	4.52587E-05	Exoc6
ENSMUSG0C 2668.310064	-1.995435739	0.43655921	-4.57082497	4.85808E-06	4.5276E-05	Fgl2
ENSMUSG0C 702.7384372	-1.11979853	0.245066151	-4.5693725	4.89187E-06	4.5573E-05	Pecr
ENSMUSG0C 5.305166082	-4.158461614	0.910729743	-4.566076431	4.96938E-06	4.62588E-05	Cacng5
ENSMUSG0C 1018.159544	-1.17330094	0.257043049	-4.564608716	5.00427E-06	4.65654E-05	Hps5
ENSMUSG0C 857.5302934	-2.232587783	0.489127555	-4.564428567	5.00857E-06	4.65871E-05	Dab1
ENSMUSG0C 1509.781905	-1.777177545	0.389562792	-4.561979692	5.06735E-06	4.71155E-05	Atxn1
ENSMUSG0C 899.4372059	-1.202712723	0.263749166	-4.560062664	5.11384E-06	4.74919E-05	Synj1
ENSMUSG0C 5712.707604	-1.910739412	0.419082165	-4.559343185	5.13139E-06	4.76177E-05	Ahcyl2
ENSMUSG0C 639.6439917	-2.73561861	0.600095551	-4.558638378	5.14863E-06	4.77404E-05	Hsd11b2
ENSMUSG0C 542.9819703	-3.49872871	0.76808738	-4.555118078	5.23562E-06	4.85091E-05	1810065E05Rik
ENSMUSG0C 19540.74784	-2.709460935	0.594905892	-4.554436211	5.25263E-06	4.86098E-05	Sgk1
ENSMUSG0C 1508.569577	-0.609711101	0.133871026	-4.554466467	5.25187E-06	4.86098E-05	Ndr3
ENSMUSG0C 1410.580738	-1.349326538	0.296256473	-4.554589215	5.2488E-06	4.86098E-05	Abca7
ENSMUSG0C 18.72200331	-2.139998429	0.469993091	-4.553255076	5.28222E-06	4.88266E-05	NA
ENSMUSG0C 3992.162096	-0.967606134	0.212571964	-4.551899112	5.31638E-06	4.91233E-05	Tle3
ENSMUSG0C 14.49491828	-2.707187503	0.59513358	-4.548873724	5.39338E-06	4.9796E-05	Slc22a12
ENSMUSG0C 2546.778488	-1.369971217	0.301255088	-4.54754549	5.42752E-06	5.00143E-05	Map7
ENSMUSG0C 123.1455222	-2.027316537	0.445820684	-4.547381069	5.43176E-06	5.00143E-05	Plscr2
ENSMUSG0C 3464.086689	-3.041671961	0.66887499	-4.547444603	5.43012E-06	5.00143E-05	Vnn1
ENSMUSG0C 14.45506193	-2.185905949	0.480943156	-4.545040135	5.49248E-06	5.05538E-05	Thsd7b
ENSMUSG0C 62.13798107	-1.593284515	0.350725314	-4.542827248	5.55047E-06	5.10678E-05	Ccdc92b
ENSMUSG0C 9.931474027	-2.835826067	0.624296778	-4.54243265	5.56088E-06	5.11239E-05	Gm13446
ENSMUSG0C 115.8629452	-2.56621137	0.564940879	-4.542442346	5.56062E-06	5.11239E-05	NA
ENSMUSG0C 3937.024525	-2.620534776	0.577542216	-4.537390868	5.69545E-06	5.23206E-05	Ptprh
ENSMUSG0C 73.94599041	-2.276179468	0.501691232	-4.537012654	5.70567E-06	5.23921E-05	Sugct
ENSMUSG0C 4495.313599	-1.624033452	0.358488602	-4.530223392	5.89214E-06	5.39742E-05	Cat
ENSMUSG0C 27.63975844	-2.692013198	0.594307332	-4.529665127	5.90772E-06	5.40824E-05	Cdkl1
ENSMUSG0C 12.55643144	-2.262776246	0.499870634	-4.526723699	5.99052E-06	5.47981E-05	Dnah5
ENSMUSG0C 3114.823624	-1.140634654	0.252090336	-4.524705985	6.04795E-06	5.53022E-05	NA
ENSMUSG0C 1321.280726	-1.378141891	0.304622227	-4.52410155	6.06526E-06	5.54391E-05	Ccdc186
ENSMUSG0C 3066.396774	-1.305482622	0.28858366	-4.523757942	6.07512E-06	5.54866E-05	Sh3d19
ENSMUSG0C 1439.170123	-0.939976293	0.207808887	-4.523272834	6.08907E-06	5.55712E-05	Stim1
ENSMUSG0C 9.316955899	-2.845407165	0.629096623	-4.52300499	6.09678E-06	5.56202E-05	Slitrk5
ENSMUSG0C 10654.03671	-1.952747544	0.431938951	-4.520887823	6.15808E-06	5.61148E-05	Coro2a
ENSMUSG0C 8809.779167	-2.430035088	0.537651604	-4.51972071	6.19213E-06	5.63818E-05	Des
ENSMUSG0C 4795.134988	-0.68551554	0.151702998	-4.518800208	6.2191E-06	5.65408E-05	Clnstn1
ENSMUSG0C 743.82276	-1.427319196	0.315881094	-4.518533159	6.22695E-06	5.65905E-05	Abcc10
ENSMUSG0C 124.018404	-3.239585668	0.717093934	-4.517658729	6.25272E-06	5.68029E-05	NA
ENSMUSG0C 8223.587981	-1.218339408	0.269701305	-4.517365636	6.26137E-06	5.68598E-05	Fat1
ENSMUSG0C 20.63963432	-2.857920031	0.632831245	-4.516085537	6.29932E-06	5.71825E-05	Sstr5

ENSMUSG0C 19.84590381	-1.859715402	0.411873593	-4.515257673	6.32398E-06	5.73845E-05	Sez6
ENSMUSG0C 5845.721664	-1.913886292	0.4239793	-4.514103151	6.35853E-06	5.76759E-05	Slc44a4
ENSMUSG0C 757.2915596	-1.383237444	0.306650226	-4.510798717	6.4584E-06	5.84925E-05	Sh3gl2
ENSMUSG0C 2001.531579	-1.029404968	0.228236114	-4.510263304	6.47472E-06	5.86179E-05	Pnpla6
ENSMUSG0C 4596.89137	-2.985002795	0.662344391	-4.506723143	6.58364E-06	5.9536E-05	Abcg5
ENSMUSG0C 1618.926332	-4.476920703	0.993655494	-4.505505912	6.6215E-06	5.981E-05	Plb1
ENSMUSG0C 21.69090327	-2.252442936	0.500013193	-4.504767008	6.64458E-06	5.99957E-05	Ptgfr
ENSMUSG0C 34.74982622	-2.71114301	0.601909698	-4.504235469	6.66123E-06	6.01111E-05	Agxt2
ENSMUSG0C 1081.267343	-1.868044284	0.414951244	-4.501840418	6.73676E-06	6.07126E-05	Plxna2
ENSMUSG0C 1512.997658	-0.776934264	0.172716591	-4.498318646	6.8493E-06	6.168E-05	Ep300
ENSMUSG0C 235.179339	-2.014911917	0.448169542	-4.495869822	6.92861E-06	6.2347E-05	Exph5
ENSMUSG0C 358.5270685	-2.400749086	0.534064095	-4.495245246	6.94898E-06	6.24593E-05	Bmp5
ENSMUSG0C 18.38746811	-2.351964577	0.523327263	-4.494251957	6.98149E-06	6.27041E-05	Hpse2
ENSMUSG0C 1595.315149	-0.826758681	0.184029942	-4.492522645	7.03844E-06	6.31917E-05	Trpm7
ENSMUSG0C 67.9889026	-1.325712435	0.295104589	-4.492347754	7.04423E-06	6.32197E-05	Crmp1
ENSMUSG0C 144.7143013	-2.052741781	0.457130718	-4.49049189	7.10589E-06	6.37009E-05	Papln
ENSMUSG0C 284.8989413	-1.596697945	0.35562366	-4.489852972	7.12724E-06	6.38682E-05	Gucy1b3
ENSMUSG0C 3625.478043	-1.065599436	0.237419512	-4.488255516	7.18088E-06	6.43004E-05	Pkp3
ENSMUSG0C 3745.23139	-2.378305586	0.529987583	-4.487474166	7.20725E-06	6.45123E-05	Dhrs11
ENSMUSG0C 11509.21068	-1.409719344	0.314205796	-4.486611513	7.23648E-06	6.47495E-05	Aco2
ENSMUSG0C 1237.743898	-1.725087461	0.384630751	-4.485048212	7.28975E-06	6.51524E-05	Pex11a
ENSMUSG0C 1427.965223	-1.557051578	0.347250645	-4.483941494	7.32768E-06	6.54668E-05	Cpeb4
ENSMUSG0C 999.2088994	-1.764252528	0.393531314	-4.483131236	7.35557E-06	6.56666E-05	Osbpl6
ENSMUSG0C 11825.87649	-1.919322085	0.428239304	-4.481891468	7.39844E-06	6.60245E-05	Erb3
ENSMUSG0C 1529.208476	-0.979929242	0.218697488	-4.480752152	7.43804E-06	6.63531E-05	Gramd4
ENSMUSG0C 2142.693457	-0.954523993	0.213040433	-4.48048279	7.44744E-06	6.64119E-05	Mink1
ENSMUSG0C 10.25664237	-2.495307689	0.557209882	-4.478218656	7.52685E-06	6.70697E-05	Rasgef1c
ENSMUSG0C 7.917266864	-3.480171905	0.777223661	-4.477696805	7.54527E-06	6.71834E-05	Vwc2
ENSMUSG0C 11.00638126	-3.760101146	0.840059648	-4.475993052	7.6057E-06	6.76961E-05	Cpt1b
ENSMUSG0C 1904.793986	-1.349943959	0.301616317	-4.475699367	7.61616E-06	6.77638E-05	Golph3l
ENSMUSG0C 259.8484967	-0.892773694	0.199522759	-4.474545646	7.6574E-06	6.80288E-05	Hacl1
ENSMUSG0C 743.4783167	-0.839422768	0.187632042	-4.473770881	7.68521E-06	6.82504E-05	Zhx1
ENSMUSG0C 77.28885246	-1.654525481	0.369861526	-4.473364665	7.69983E-06	6.83292E-05	Zfp939
ENSMUSG0C 448.0319633	-0.767371087	0.171590874	-4.472097308	7.74562E-06	6.86842E-05	Ankra2
ENSMUSG0C 8820.498755	-2.612923865	0.584285424	-4.471999053	7.74918E-06	6.86901E-05	Ugt2b34
ENSMUSG0C 1349.051864	-0.808556523	0.180810944	-4.471833985	7.75516E-06	6.87E-05	Kmt5b
ENSMUSG0C 147.8017958	-0.809935154	0.181120255	-4.471808829	7.75607E-06	6.87E-05	Trpt1
ENSMUSG0C 244.2402311	-1.537959542	0.343938982	-4.471605788	7.76344E-06	6.87396E-05	Rbpms2
ENSMUSG0C 9.489410137	-3.281113963	0.734157784	-4.469221785	7.85047E-06	6.94325E-05	Foxb1
ENSMUSG0C 153.823302	-2.131255612	0.476899916	-4.468978791	7.85939E-06	6.94856E-05	Slitrk6
ENSMUSG0C 41154.97617	-3.229125928	0.722650621	-4.468446904	7.87896E-06	6.96326E-05	Clec2h
ENSMUSG0C 8501.312998	-1.156334204	0.25880495	-4.467975611	7.89633E-06	6.97343E-05	Sptbn1
ENSMUSG0C 1198.817347	-1.024643698	0.229363078	-4.467343675	7.91968E-06	6.99145E-05	Trappc8
ENSMUSG0C 2206.709305	-1.320494314	0.295788884	-4.464313525	8.03259E-06	7.08586E-05	Mpi
ENSMUSG0C 1211.675699	-0.855590407	0.191666504	-4.463953745	8.04609E-06	7.09514E-05	Mtmt12
ENSMUSG0C 5876.992023	-2.728080065	0.61129054	-4.462820684	8.08877E-06	7.1222E-05	Vdr
ENSMUSG0C 9226.265925	-0.943818524	0.211563241	-4.461164987	8.15153E-06	7.16683E-05	Pitpna
ENSMUSG0C 1563.571216	-3.017991799	0.676624695	-4.460363069	8.18209E-06	7.19104E-05	Gal3st2
ENSMUSG0C 32576.78127	-3.468912554	0.778230324	-4.45743689	8.29454E-06	7.2791E-05	Slc6a19
ENSMUSG0C 2751.873653	-1.450620677	0.325512125	-4.456425944	8.33374E-06	7.31079E-05	Stap2
ENSMUSG0C 853.613295	-0.808410746	0.181580974	-4.452067473	8.50474E-06	7.4498E-05	Cramp1l
ENSMUSG0C 5879.086276	-3.037086081	0.682256304	-4.451532458	8.52596E-06	7.46564E-05	Slc3a1
ENSMUSG0C 70.52265443	-2.966734995	0.666491547	-4.451271749	8.53632E-06	7.47196E-05	Defa34
ENSMUSG0C 46.29179724	-1.735781704	0.390015397	-4.450546616	8.5652E-06	7.49171E-05	Fam189a1
ENSMUSG0C 33.22403683	-1.680913533	0.377710603	-4.45026833	8.57631E-06	7.49867E-05	Lrtm1
ENSMUSG0C 13.3878776	-3.08773764	0.694207424	-4.447860296	8.67299E-06	7.57456E-05	NA
ENSMUSG0C 1551.090006	-0.705641944	0.15865286	-4.447710216	8.67905E-06	7.57456E-05	Rnf141
ENSMUSG0C 80.848807	-1.616142649	0.363490705	-4.446173249	8.74135E-06	7.62333E-05	Lgi4
ENSMUSG0C 394.0423229	-1.154784864	0.259760178	-4.445580817	8.76547E-06	7.63876E-05	Arl13b
ENSMUSG0C 5425.175777	-2.464171991	0.554352252	-4.445137517	8.78357E-06	7.64616E-05	Fam84a
ENSMUSG0C 1051.371345	-0.838748425	0.188689034	-4.445136045	8.78363E-06	7.64616E-05	Xrn1
ENSMUSG0C 9813.49759	-1.712790963	0.385427966	-4.443867897	8.83559E-06	7.68858E-05	Rnf128
ENSMUSG0C 69.40287764	-1.416997738	0.318937258	-4.442873022	8.87656E-06	7.7214E-05	Dgkh
ENSMUSG0C 178.2898535	-1.330117992	0.29956929	-4.440101291	8.99165E-06	7.81505E-05	Aspn
ENSMUSG0C 3467.599427	-2.481837803	0.558967052	-4.440043104	8.99409E-06	7.81505E-05	Isx
ENSMUSG0C 1665.416003	-2.051103521	0.461973219	-4.439875385	9.0011E-06	7.81828E-05	Gp1bb
ENSMUSG0C 985.0793293	-1.133918622	0.255657596	-4.435301904	9.19433E-06	7.96284E-05	Cbx7



ENSMUSG0C 30462.92948	-3.386435884	0.76355779	-4.435074763	9.20403E-06	7.96543E-05	Ennep
ENSMUSG0C 11.25293333	-3.671751817	0.828017942	-4.434386781	9.23347E-06	7.98509E-05	NA
ENSMUSG0C 76.92727157	-2.201115595	0.496838612	-4.430242624	9.41271E-06	8.11646E-05	Akap6
ENSMUSG0C 3049.43604	-0.829536132	0.187254989	-4.429981473	9.42412E-06	8.1204E-05	Ppp2r5c
ENSMUSG0C 1729.332423	-1.342798363	0.303110936	-4.430055814	9.42087E-06	8.1204E-05	Cmip
ENSMUSG0C 896.4350593	-1.203650239	0.271882717	-4.427093612	9.55113E-06	8.21791E-05	Dapp1
ENSMUSG0C 1277.576025	-2.403757935	0.54340038	-4.423548499	9.70928E-06	8.32986E-05	Ldb3
ENSMUSG0C 3261.301687	-1.058286004	0.239345659	-4.421580109	9.79817E-06	8.39702E-05	Zbtb7a
ENSMUSG0C 20.79944663	-3.164563689	0.715794002	-4.421053656	9.82208E-06	8.41144E-05	Tmem174
ENSMUSG0C 111.6207111	-2.487684833	0.563111547	-4.417747861	9.97347E-06	8.53801E-05	Brinp2
ENSMUSG0C 3303.710641	-1.649600512	0.373612143	-4.41527542	1.00881E-05	8.63307E-05	Man1a
ENSMUSG0C 3137.362239	-0.80043222	0.181290865	-4.415182298	1.00925E-05	8.63368E-05	Tsc22d4
ENSMUSG0C 2912.383045	-0.684380065	0.155016166	-4.414894795	1.01059E-05	8.64205E-05	Gdi1
ENSMUSG0C 195.8279041	-1.878116198	0.425481054	-4.414100654	1.01431E-05	8.67071E-05	NA
ENSMUSG0C 265.0143068	-1.387441101	0.314378956	-4.413275999	1.01818E-05	8.70068E-05	Zfp871
ENSMUSG0C 859.2733045	-1.20798452	0.273845773	-4.411185562	1.02806E-05	8.7788E-05	Slc17a5
ENSMUSG0C 4608.484466	-2.501820472	0.56734798	-4.409675473	1.03526E-05	8.83678E-05	Gk
ENSMUSG0C 20.05793569	-2.135308807	0.484352183	-4.408587143	1.04047E-05	8.86883E-05	Adra2b
ENSMUSG0C 39176.67856	-2.780426339	0.630731459	-4.408256949	1.04206E-05	8.87599E-05	Clca4b
ENSMUSG0C 7508.944735	-1.609643665	0.365313701	-4.406195715	1.05202E-05	8.95441E-05	Fkbp5
ENSMUSG0C 8.251000379	-3.304237741	0.750137417	-4.404843256	1.0586E-05	9.00079E-05	Dnah7a
ENSMUSG0C 32.18608168	-2.262204158	0.51357055	-4.404855689	1.05854E-05	9.00079E-05	NA
ENSMUSG0C 925.8600324	-2.417772558	0.549084841	-4.403276831	1.06628E-05	9.05632E-05	Mia2
ENSMUSG0C 557.0680867	-1.03365284	0.234774209	-4.402752943	1.06886E-05	9.07498E-05	Fpgt
ENSMUSG0C 2677.108454	-2.176051122	0.494282093	-4.402447821	1.07036E-05	9.08451E-05	Fzd5
ENSMUSG0C 2221.461191	-0.96308463	0.218794374	-4.401779674	1.07367E-05	9.10603E-05	Slc37a1
ENSMUSG0C 1124.222555	-1.027624599	0.233526558	-4.400461385	1.08021E-05	9.15645E-05	Spen
ENSMUSG0C 15.88851314	-2.144394818	0.487469264	-4.399035953	1.08733E-05	9.20876E-05	Adamts18
ENSMUSG0C 1584.470493	-1.124657536	0.255702878	-4.398298309	1.09103E-05	9.23681E-05	Vwa8
ENSMUSG0C 2338.385371	-2.184830346	0.496863448	-4.397245065	1.09634E-05	9.27843E-05	Cmb1
ENSMUSG0C 265.2214289	-1.736761678	0.395032611	-4.396502031	1.10009E-05	9.29698E-05	Ston2
ENSMUSG0C 278.7506591	-1.381959406	0.314323535	-4.396614488	1.09952E-05	9.29698E-05	Zfp773
ENSMUSG0C 3538.587361	-0.581774372	0.132357484	-4.395477708	1.10529E-05	9.33429E-05	Csnk2a1
ENSMUSG0C 521.4428797	-2.145213597	0.488164796	-4.394445514	1.11056E-05	9.37209E-05	NA
ENSMUSG0C 85.02451647	-1.201440225	0.273418448	-4.394144707	1.1121E-05	9.38174E-05	Chrn2
ENSMUSG0C 262.6524939	-2.40378681	0.547089627	-4.3937715	1.11401E-05	9.3912E-05	Abcc6
ENSMUSG0C 1290.510248	-1.018568423	0.231869701	-4.392848298	1.11875E-05	9.42784E-05	Serhl
ENSMUSG0C 35.44453761	-2.32322859	0.528963252	-4.392041569	1.12291E-05	9.45284E-05	Dnah10
ENSMUSG0C 49.94201563	-1.654151276	0.37661909	-4.392106826	1.12258E-05	9.45284E-05	Cxcl11
ENSMUSG0C 3627.128245	-0.927869243	0.211642194	-4.384141109	1.16444E-05	9.78511E-05	Dgkz
ENSMUSG0C 62.16735964	-2.383039371	0.543620937	-4.383641631	1.16712E-05	9.80411E-05	Abca14
ENSMUSG0C 23.37405138	-2.472527906	0.564313936	-4.381475889	1.17878E-05	9.8951E-05	Stk32a
ENSMUSG0C 3314.910837	-1.64633473	0.37596888	-4.378912245	1.19273E-05	0.000100063	Sec23a
ENSMUSG0C 155.5286815	-1.774660435	0.405276583	-4.378887189	1.19287E-05	0.000100063	Mmp17
ENSMUSG0C 4898.892111	-1.007919105	0.230315134	-4.376260858	1.20733E-05	0.000101168	Acadv1
ENSMUSG0C 13796.41168	-1.036249206	0.236818828	-4.375704479	1.21041E-05	0.000101391	Tpm1
ENSMUSG0C 2337.317772	-1.434660425	0.327889607	-4.375437324	1.21189E-05	0.000101479	Klf5
ENSMUSG0C 604.4842693	-1.222025518	0.279347866	-4.374565425	1.21675E-05	0.00010185	Mapkbp1
ENSMUSG0C 4906.562093	-1.313740343	0.300529924	-4.371412759	1.23445E-05	0.000103148	Aco1
ENSMUSG0C 6.234934315	-3.507537187	0.802384546	-4.371391752	1.23457E-05	0.000103148	Got11
ENSMUSG0C 6627.024942	-1.332231074	0.30483782	-4.370294586	1.24079E-05	0.000103498	Eps8
ENSMUSG0C 20.51969109	-2.206720676	0.505574675	-4.36477693	1.27253E-05	0.000106033	NA
ENSMUSG0C 13.90606443	-2.43263527	0.557445162	-4.363900587	1.27764E-05	0.000106347	Gprin1
ENSMUSG0C 5054.954809	-1.225669773	0.280937616	-4.362782711	1.28418E-05	0.00010678	Arhgef5
ENSMUSG0C 6431.166706	-1.549352062	0.355204025	-4.361865157	1.28958E-05	0.000107154	B4galnt1
ENSMUSG0C 6.859415054	-2.958711207	0.678480357	-4.360791256	1.29593E-05	0.000107531	Hmx3
ENSMUSG0C 1322.571279	-0.643777164	0.147636426	-4.360557771	1.29731E-05	0.000107608	Dido1
ENSMUSG0C 12530.56935	-1.803614556	0.413677527	-4.359952954	1.3009E-05	0.000107831	H2-Aa
ENSMUSG0C 6986.916221	-0.894316319	0.205125235	-4.359855182	1.30149E-05	0.000107841	NA
ENSMUSG0C 232.7001123	-0.930927789	0.213539662	-4.359507655	1.30355E-05	0.000107975	Ap4e1
ENSMUSG0C 1336.984934	-1.074341245	0.246500808	-4.35836805	1.31036E-05	0.000108501	Stxbp5
ENSMUSG0C 719.8282629	-0.701831627	0.161124362	-4.355838045	1.32559E-05	0.000109685	Pcnt
ENSMUSG0C 914.8380706	-1.743053799	0.400231287	-4.355116291	1.32996E-05	0.000109971	Acox2
ENSMUSG0C 739.7330158	-0.933731069	0.214407455	-4.354937508	1.33105E-05	0.000110022	Zscan26
ENSMUSG0C 978.2446208	-1.313688161	0.30169966	-4.354291155	1.33498E-05	0.000110309	Coq8a
ENSMUSG0C 1549.861769	-1.038810574	0.238798796	-4.350149969	1.36044E-05	0.000112257	Pdpk1
ENSMUSG0C 8.066417724	-4.010053704	0.921974978	-4.349417065	1.365E-05	0.000112554	Ppy



ENSMUSG0C 4169.260708	-1.65607735	0.380776586	-4.349210035	1.36629E-05	0.000112622	Sar1b
ENSMUSG0C 11.65130478	-2.965566579	0.681906557	-4.348933951	1.36801E-05	0.000112724	NA
ENSMUSG0C 5252.464962	-3.006660516	0.691466004	-4.34824055	1.37234E-05	0.000113042	Abcg8
ENSMUSG0C 21.73556065	-1.882673956	0.432981221	-4.348165379	1.37281E-05	0.000113042	NA
ENSMUSG0C 1390.179546	-1.743880252	0.40110713	-4.347667049	1.37593E-05	0.00011322	Ehhadh
ENSMUSG0C 558.0122401	-0.93557322	0.215203432	-4.347389867	1.37767E-05	0.000113305	Mid2
ENSMUSG0C 1955.223819	-0.7220911	0.166099131	-4.347350265	1.37792E-05	0.000113305	Oxsr1
ENSMUSG0C 11.37020449	-2.335373182	0.537426089	-4.345477882	1.38973E-05	0.000114237	Lrnf5
ENSMUSG0C 1529.389468	-1.372873727	0.315950004	-4.345224592	1.39133E-05	0.000114329	Fcho2
ENSMUSG0C 1083.884224	-1.273004197	0.292994384	-4.344807507	1.39398E-05	0.000114507	C2cd5
ENSMUSG0C 892.6934599	-1.171771084	0.26973084	-4.344223617	1.39769E-05	0.000114761	Slc35e2
ENSMUSG0C 1579.632085	-2.435547363	0.56064749	-4.344168852	1.39804E-05	0.000114761	Trim31
ENSMUSG0C 49.83250438	-2.854809777	0.657316326	-4.34312927	1.40467E-05	0.000115226	Myocd
ENSMUSG0C 8723.98041	-0.952805071	0.219437115	-4.342041548	1.41165E-05	0.000115758	Mapk3
ENSMUSG0C 795.1319742	-1.005181628	0.231515235	-4.34175154	1.41351E-05	0.000115871	Miga2
ENSMUSG0C 1885.63461	-1.263743811	0.291139867	-4.340675926	1.42045E-05	0.000116319	B4galt5
ENSMUSG0C 31.29999121	-1.88332023	0.433900769	-4.340439943	1.42198E-05	0.000116404	Necab2
ENSMUSG0C 1322.625644	-0.665527686	0.153359089	-4.339669011	1.42697E-05	0.000116773	Rnf185
ENSMUSG0C 5977.482218	-1.546025411	0.356505235	-4.336613489	1.44695E-05	0.000118163	Pfkf
ENSMUSG0C 1226.24994	-0.949851458	0.219172823	-4.333801267	1.46556E-05	0.00011956	Rb1cc1
ENSMUSG0C 1414.889229	-1.301041103	0.300215184	-4.333695204	1.46627E-05	0.000119577	Lgals8
ENSMUSG0C 58.2460993	-3.234620622	0.746636236	-4.332257751	1.47588E-05	0.000120319	Ttll6
ENSMUSG0C 658.4793201	-0.805351472	0.185922875	-4.331642744	1.48001E-05	0.000120573	Agfg2
ENSMUSG0C 1280.684123	-0.654606892	0.151247345	-4.328055415	1.50432E-05	0.000122469	Vwa5a
ENSMUSG0C 303.3118037	-1.826954633	0.422287343	-4.326330554	1.51614E-05	0.000123389	Upk1b
ENSMUSG0C 15.73696582	-3.358419644	0.776550334	-4.32479325	1.52675E-05	0.000124041	NA
ENSMUSG0C 11.63713718	-2.123547302	0.491028434	-4.324693141	1.52744E-05	0.000124055	2700089I24Rik
ENSMUSG0C 1224.24572	-1.617362937	0.374011624	-4.324365424	1.52972E-05	0.000124197	Camk2b
ENSMUSG0C 4657.634412	-1.132761575	0.261982324	-4.323809163	1.53358E-05	0.000124467	Ehd1
ENSMUSG0C 5851.420428	-2.56874812	0.594268304	-4.322539339	1.54244E-05	0.000124973	Heph
ENSMUSG0C 2587.251913	-2.365323224	0.547343092	-4.321463554	1.54998E-05	0.000125498	Cnn1
ENSMUSG0C 12.07431734	-2.601140308	0.601977624	-4.320991683	1.5533E-05	0.000125724	Tmem200c
ENSMUSG0C 134.7184351	-3.06663416	0.709763737	-4.320640798	1.55577E-05	0.000125882	NA
ENSMUSG0C 30.91849505	-1.71709368	0.397448277	-4.320294687	1.55821E-05	0.000126036	9230105E05Rik
ENSMUSG0C 3754.440328	-1.516506295	0.351066312	-4.319714664	1.56231E-05	0.000126325	Mcu
ENSMUSG0C 9.376316719	-2.374995886	0.549847392	-4.319372828	1.56473E-05	0.000126478	NA
ENSMUSG0C 1211.118418	-1.857149053	0.430033466	-4.318615176	1.57011E-05	0.000126869	Hyl
ENSMUSG0C 5.49714423	-3.404346116	0.788611323	-4.316887187	1.58245E-05	0.000127823	NA
ENSMUSG0C 619.6808152	-1.354677785	0.313904269	-4.315576182	1.59187E-05	0.000128453	Acy3
ENSMUSG0C 23.38133467	-3.018219127	0.699360978	-4.315681347	1.59111E-05	0.000128453	Klrb1c
ENSMUSG0C 71.73960843	-1.880623879	0.435769695	-4.315637141	1.59143E-05	0.000128453	Pcp4
ENSMUSG0C 1607.045017	-2.37296435	0.549906248	-4.315216203	1.59447E-05	0.000128619	Fhl1
ENSMUSG0C 1871.414229	-0.898326928	0.208198984	-4.314751744	1.59782E-05	0.000128846	Elmo3
ENSMUSG0C 18262.33763	-2.981098728	0.691006067	-4.314142626	1.60223E-05	0.000129121	Mep1b
ENSMUSG0C 98.64059166	-1.00414991	0.232811817	-4.31313979	1.60952E-05	0.000129613	9130019O22Rik
ENSMUSG0C 14.64647513	-2.350631672	0.545033245	-4.312822552	1.61183E-05	0.000129755	NA
ENSMUSG0C 2365.388526	-0.928037749	0.21518706	-4.312702388	1.61271E-05	0.000129782	Lrrfip2
ENSMUSG0C 79.91796725	-1.478925896	0.342995267	-4.311796806	1.61933E-05	0.00013027	Mtcp1
ENSMUSG0C 95.21904334	-2.76589226	0.641559556	-4.311201097	1.6237E-05	0.000130578	Gpm6a
ENSMUSG0C 469.9738496	-1.849019307	0.428967772	-4.310392123	1.62965E-05	0.000131012	Aoc3
ENSMUSG0C 2231.299783	-0.878050588	0.203757735	-4.309287147	1.63782E-05	0.000131535	Atp6v0a1
ENSMUSG0C 247.3499233	-1.264210735	0.293503656	-4.307308308	1.65253E-05	0.000132582	Trdmt1
ENSMUSG0C 1173.313662	-1.979152395	0.459584324	-4.306396656	1.65935E-05	0.000132925	Bmp3
ENSMUSG0C 3650.17941	-1.904813682	0.442429023	-4.305354263	1.66719E-05	0.000133397	Bcar3
ENSMUSG0C 15.22433813	-2.114964414	0.49138557	-4.30408328	1.67679E-05	0.000134075	NA
ENSMUSG0C 24.02936582	-2.306963394	0.536220162	-4.30226903	1.69058E-05	0.000135087	Vwa3a
ENSMUSG0C 21707.69365	-1.607516354	0.373667321	-4.301998765	1.69264E-05	0.000135207	Slc25a5
ENSMUSG0C 175.652626	-2.923278024	0.67964191	-4.301203299	1.69873E-05	0.000135647	Sntg2
ENSMUSG0C 2825.694133	-0.734710786	0.170822816	-4.301010855	1.70021E-05	0.000135702	Zc3h7a
ENSMUSG0C 3408.565513	-1.39251926	0.32382756	-4.300187601	1.70654E-05	0.000136133	Ndfip2
ENSMUSG0C 31.01141875	-1.473678547	0.342748335	-4.299593603	1.71112E-05	0.000136407	Olfir775
ENSMUSG0C 5239.645846	-1.662404806	0.386711923	-4.29881963	1.7171E-05	0.000136838	Scp2
ENSMUSG0C 100.2825034	-1.681795844	0.391542512	-4.295308403	1.74451E-05	0.000138836	Nxf7
ENSMUSG0C 196.7232789	-3.136299733	0.730453354	-4.293634516	1.75772E-05	0.000139747	Apol7c
ENSMUSG0C 2746.610887	-0.677005114	0.157704635	-4.292867564	1.7638E-05	0.000140184	Ap1b1
ENSMUSG0C 338.9226698	-1.489570486	0.347111302	-4.291333872	1.77603E-05	0.000141014	Rab19
ENSMUSG0C 52.35266225	-1.228607938	0.286318598	-4.291051814	1.77829E-05	0.000141146	Sv2c

ENSMUSG0C 5.383976167	-3.678897888	0.857405502	-4.290732775	1.78085E-05	0.000141302	Chrna7
ENSMUSG0C 155.4122318	-2.157739378	0.502996302	-4.289771852	1.78857E-05	0.00014182	Adam33
ENSMUSG0C 85.47077328	-2.721080444	0.634331012	-4.289685341	1.78926E-05	0.000141828	Nap1l5
ENSMUSG0C 98.76993677	-2.212168403	0.515742564	-4.289288022	1.79247E-05	0.000141987	Chd5
ENSMUSG0C 4636.959579	-0.725735299	0.169290616	-4.286919832	1.81168E-05	0.000143365	Lman2
ENSMUSG0C 8285.707377	-2.303700984	0.537426349	-4.286542685	1.81475E-05	0.000143561	Actg2
ENSMUSG0C 2421.91664	-1.75623939	0.409766698	-4.285949535	1.8196E-05	0.000143896	Mocs2
ENSMUSG0C 94.97141213	-1.962925257	0.458063579	-4.285268135	1.82519E-05	0.000144242	D330045A20Rik
ENSMUSG0C 1856.90417	-1.367150624	0.319043898	-4.285148949	1.82617E-05	0.000144272	Pgpep1
ENSMUSG0C 15.97162545	-1.875374894	0.437840643	-4.283236203	1.84194E-05	0.00014538	Kcnj11
ENSMUSG0C 51.46444556	-2.148600497	0.501779669	-4.281960052	1.85254E-05	0.000146161	Ahrr
ENSMUSG0C 3498.292951	-1.470486948	0.343509634	-4.280773522	1.86245E-05	0.000146893	Arfgap3
ENSMUSG0C 790.5851809	-1.294449187	0.302432303	-4.280128726	1.86785E-05	0.000147271	Tmem125
ENSMUSG0C 9942.018032	-0.998204261	0.233238276	-4.279761793	1.87093E-05	0.000147465	Cldn3
ENSMUSG0C 25.46312264	-2.84755909	0.665424614	-4.279311332	1.87472E-05	0.000147715	NA
ENSMUSG0C 914.8109115	-1.215652605	0.284126597	-4.278559695	1.88107E-05	0.000148165	Sepsecs
ENSMUSG0C 37050.19478	-2.007368832	0.46919785	-4.278299302	1.88327E-05	0.000148289	Muc13
ENSMUSG0C 766.2859414	-0.736741205	0.172256491	-4.277001112	1.89428E-05	0.000149058	Osbpl11
ENSMUSG0C 148.7244957	-1.47322175	0.344458148	-4.276925249	1.89492E-05	0.000149059	Mreg
ENSMUSG0C 407.4984065	-0.983920045	0.230065511	-4.276695105	1.89688E-05	0.000149065	Dusp12
ENSMUSG0C 1621.464411	-1.760648749	0.411682797	-4.276711198	1.89674E-05	0.000149065	Adk
ENSMUSG0C 916.4927969	-0.812873583	0.190074573	-4.276603502	1.89766E-05	0.000149077	Uckl1
ENSMUSG0C 2295.71328	-0.990371255	0.231592791	-4.276347517	1.89985E-05	0.000149199	Med13
ENSMUSG0C 15.85928825	-2.441845023	0.571326541	-4.273991929	1.92004E-05	0.000150636	Sucnr1
ENSMUSG0C 67.54042003	-1.345985668	0.314962007	-4.273485816	1.92441E-05	0.000150928	NA
ENSMUSG0C 91.6871235	-2.846276785	0.666145992	-4.272752252	1.93075E-05	0.000151326	Tmeff2
ENSMUSG0C 2258.678179	-1.143637342	0.267687368	-4.272287295	1.93478E-05	0.000151592	Tmem87b
ENSMUSG0C 7461.079043	-1.124909154	0.263356272	-4.271434836	1.94219E-05	0.000152122	Calm3
ENSMUSG0C 25.46841966	-1.714406311	0.401420467	-4.270849272	1.9473E-05	0.000152422	Ccdc148
ENSMUSG0C 2633.282126	-1.388905377	0.325236855	-4.270442776	1.95085E-05	0.00015265	NA
ENSMUSG0C 1863.469889	-1.002951002	0.234913338	-4.269451064	1.95955E-05	0.000153279	D5Ertd579e
ENSMUSG0C 144.746945	-1.744866261	0.40875053	-4.268780421	1.96545E-05	0.00015364	Hykk
ENSMUSG0C 4823.43175	-1.002866277	0.235062184	-4.266387135	1.98664E-05	0.000155143	Slc31a1
ENSMUSG0C 3609.690764	-0.784293288	0.183852586	-4.265881178	1.99115E-05	0.000155342	Vegfa
ENSMUSG0C 411.5408306	-2.696108997	0.632009838	-4.265928841	1.99072E-05	0.000155342	Bcl2l15
ENSMUSG0C 2046.615179	-1.047990173	0.24573848	-4.26465637	2.0021E-05	0.000156094	Gbf1
ENSMUSG0C 295.7094369	-1.58595663	0.372115805	-4.261997496	2.02608E-05	0.000157756	Stxbp6
ENSMUSG0C 511.6986355	-1.296330954	0.304165734	-4.261923056	2.02675E-05	0.000157757	Utp14b
ENSMUSG0C 144.4998609	-1.260995486	0.29589859	-4.261579908	2.02987E-05	0.000157899	Abhd1
ENSMUSG0C 20.76146796	-1.795813688	0.42144679	-4.261068607	2.03452E-05	0.000158154	Fxyd7
ENSMUSG0C 32.77527212	-2.158996527	0.507433518	-4.254737712	2.09294E-05	0.000162324	Scn3a
ENSMUSG0C 636.2731592	-1.003769374	0.236067847	-4.252037642	2.11834E-05	0.000164086	Snappc5
ENSMUSG0C 3069.745061	-0.943565346	0.221909384	-4.252029936	2.11842E-05	0.000164086	Lmtk2
ENSMUSG0C 2201.486009	-1.700865506	0.400074069	-4.251376525	2.12461E-05	0.000164512	Prkca
ENSMUSG0C 198.3918094	-1.676332408	0.394481412	-4.249458543	2.14288E-05	0.000165764	Uppt
ENSMUSG0C 194.2250338	-1.263781851	0.29749069	-4.24813917	2.15553E-05	0.000166689	Pde8b
ENSMUSG0C 5.144638234	-4.007348219	0.943636266	-4.24670857	2.16934E-05	0.000167593	Adra2c
ENSMUSG0C 42635.60573	-1.204694048	0.283770036	-4.245318029	2.18284E-05	0.000168526	Tmbim6
ENSMUSG0C 398.0636794	-1.86362728	0.439192797	-4.243301104	2.20256E-05	0.000169938	Zc3h12d
ENSMUSG0C 18.36764865	-1.877234116	0.442476279	-4.242564418	2.2098E-05	0.000170442	St8sia3
ENSMUSG0C 1366.075621	-0.843334498	0.198838952	-4.241294227	2.22235E-05	0.000171354	Angel2
ENSMUSG0C 2440.779875	-1.000651374	0.235947097	-4.240998876	2.22527E-05	0.000171524	Myo1e
ENSMUSG0C 41.41952467	-2.506277839	0.591117349	-4.239898972	2.2362E-05	0.000172199	C7
ENSMUSG0C 430.1013991	-1.291062427	0.304732787	-4.236703379	2.26825E-05	0.00017444	Lnpep
ENSMUSG0C 18.14304336	-1.974245113	0.466003987	-4.236541246	2.26989E-05	0.00017451	Kcnj5
ENSMUSG0C 14.72859013	-2.322999579	0.548523251	-4.235006581	2.28545E-05	0.000175649	Zfp536
ENSMUSG0C 16807.12603	-0.814544838	0.192499452	-4.231413793	2.32227E-05	0.000178214	Gnb1
ENSMUSG0C 304.7080069	-1.229596245	0.290610351	-4.231082061	2.3257E-05	0.000178396	Ins16
ENSMUSG0C 141.0914269	-1.101036123	0.26035054	-4.229052578	2.34678E-05	0.000179897	Zfp729a
ENSMUSG0C 376.5370697	-1.851660679	0.437898229	-4.228518304	2.35235E-05	0.000180208	Mustn1
ENSMUSG0C 936.2995891	-1.401990558	0.331788343	-4.225557011	2.3835E-05	0.000182301	Acvr2a
ENSMUSG0C 92.8770682	-1.275273425	0.301942391	-4.223565371	2.40468E-05	0.000183801	Trpc1
ENSMUSG0C 77100.14628	-2.509389711	0.594167229	-4.223372795	2.40673E-05	0.000183899	Fcgbp
ENSMUSG0C 3158.630103	-1.782704897	0.422159436	-4.222823759	2.4126E-05	0.00018423	Naprt
ENSMUSG0C 5580.270163	-2.494865773	0.590799418	-4.222864306	2.41217E-05	0.00018423	Cds1
ENSMUSG0C 184.1809386	-2.700503564	0.639749967	-4.221185938	2.4302E-05	0.000185514	Cldn8
ENSMUSG0C 39.86139907	-2.213834854	0.52447447	-4.221053606	2.43163E-05	0.000185563	Gpr3711

ENSMUSG0C 21.42260755	-4.075525409	0.96561225	-4.220664566	2.43583E-05	0.000185824	Defb40
ENSMUSG0C 5311.243108	-1.260048396	0.298558367	-4.220442417	2.43823E-05	0.000185948	Chmp2b
ENSMUSG0C 241.6705999	-1.420619092	0.336610575	-4.220363818	2.43908E-05	0.000185953	Zfp462
ENSMUSG0C 44.34901354	-1.595810955	0.378188266	-4.219620482	2.44714E-05	0.000186507	Jph4
ENSMUSG0C 30.97630005	-2.519062915	0.597099343	-4.218833838	2.45569E-05	0.000187099	NA
ENSMUSG0C 462.269307	-0.892293204	0.211510602	-4.218668926	2.45749E-05	0.000187176	Entpd2
ENSMUSG0C 46.3525232	-1.73571862	0.411577688	-4.217232055	2.47319E-05	0.000188191	Kcnh6
ENSMUSG0C 1678.849399	-1.034889324	0.245404659	-4.217072856	2.47494E-05	0.000188219	Dnajb12
ENSMUSG0C 3031.861713	-0.955739762	0.226798872	-4.21404107	2.50842E-05	0.000190627	Itpril2
ENSMUSG0C 2823.825146	-0.902412943	0.214296204	-4.211054262	2.54182E-05	0.000192795	Esyt2
ENSMUSG0C 2298.805764	-0.929927555	0.220963866	-4.208505085	2.57066E-05	0.000194796	Pja1
ENSMUSG0C 23.60403681	-1.74112007	0.413806158	-4.207574092	2.58127E-05	0.000195351	Tnr
ENSMUSG0C 2568.601798	-1.866666271	0.443641775	-4.207598057	2.58099E-05	0.000195351	Gramd1b
ENSMUSG0C 10.2307357	-3.838008974	0.912158297	-4.207612854	2.58083E-05	0.000195351	NA
ENSMUSG0C 44.03419438	-1.685272068	0.400574796	-4.207134559	2.58629E-05	0.000195669	NA
ENSMUSG0C 5597.714536	-1.176701886	0.27971497	-4.206789092	2.59025E-05	0.000195843	Txndc17
ENSMUSG0C 566.1005388	-2.511927505	0.597301883	-4.205457199	2.60555E-05	0.000196937	Zbtb16
ENSMUSG0C 1543.814553	-1.307393221	0.311041719	-4.203272871	2.63083E-05	0.000198659	Rab17
ENSMUSG0C 4045.660232	-1.580104973	0.375995589	-4.202456137	2.64034E-05	0.00019925	Elov1
ENSMUSG0C 561.7295143	-1.252125468	0.297948115	-4.202495016	2.63989E-05	0.00019925	NA
ENSMUSG0C 2883.132301	-1.471956606	0.350363462	-4.201227483	2.65472E-05	0.000200208	Fam8a1
ENSMUSG0C 4224.574168	-1.386411483	0.330008931	-4.201133218	2.65582E-05	0.000200228	Capn1
ENSMUSG0C 1003.461327	-0.983368252	0.234111636	-4.200424501	2.66415E-05	0.000200728	Nmi
ENSMUSG0C 14.1110821	-2.553355199	0.607877651	-4.20044263	2.66394E-05	0.000200728	Apol7b
ENSMUSG0C 5.717656498	-3.389184809	0.807275498	-4.198300105	2.68926E-05	0.000202492	Cdh8
ENSMUSG0C 12.86850992	-2.192708735	0.522319151	-4.198024774	2.69253E-05	0.000202674	Clvs1
ENSMUSG0C 893.7265341	-1.565297637	0.372952593	-4.197041839	2.70424E-05	0.00020349	Fam83f
ENSMUSG0C 2780.905978	-1.123400892	0.267752166	-4.195674334	2.72061E-05	0.000204657	Stx3
ENSMUSG0C 1343.867596	-1.359762659	0.324137337	-4.195020148	2.72847E-05	0.000205142	A930011G23Rik
ENSMUSG0C 317.8786483	-1.099640967	0.26225548	-4.193014255	2.75272E-05	0.000206876	Them4
ENSMUSG0C 72257.90132	-2.730102607	0.651155303	-4.192705788	2.75647E-05	0.000207093	Zg16
ENSMUSG0C 33.72469857	-1.44459106	0.344890159	-4.188554011	2.80738E-05	0.000210717	NA
ENSMUSG0C 823.7042632	-1.244686757	0.297191555	-4.188163275	2.81221E-05	0.000210947	Crbn
ENSMUSG0C 76.47093008	-3.330549042	0.795644487	-4.185976398	2.83943E-05	0.000212787	NA
ENSMUSG0C 642.949352	-1.846168008	0.441187674	-4.184541226	2.85743E-05	0.000213933	Jph2
ENSMUSG0C 16581.16837	-2.972811555	0.710718682	-4.182824555	2.8791E-05	0.000215284	Cyp4f14
ENSMUSG0C 9784.035688	-1.518913268	0.363175417	-4.182313005	2.88558E-05	0.000215701	Ahnak
ENSMUSG0C 345.3825888	-0.640828864	0.15324936	-4.181608732	2.89454E-05	0.000216235	Msh3
ENSMUSG0C 8.514095547	-3.501459496	0.837549646	-4.180599337	2.90742E-05	0.00021706	C9
ENSMUSG0C 2282.016337	-1.163275003	0.278328908	-4.179497597	2.92154E-05	0.000217909	Slc12a7
ENSMUSG0C 676.3133056	-2.342317837	0.560451833	-4.179338343	2.92358E-05	0.000217993	Depdc7
ENSMUSG0C 152.9854886	-1.691233936	0.40468952	-4.17909002	2.92678E-05	0.000218095	NA
ENSMUSG0C 774.0404476	-1.02679483	0.245710949	-4.178872917	2.92957E-05	0.000218234	Ccdc93
ENSMUSG0C 1350.452322	-0.834537145	0.199760344	-4.177691759	2.94482E-05	0.000219285	Tob2
ENSMUSG0C 379.2388853	-1.708897772	0.409073536	-4.177483075	2.94753E-05	0.000219365	Cped1
ENSMUSG0C 59.07339567	-1.643666969	0.393483856	-4.177215775	2.95099E-05	0.000219554	Ankrd35
ENSMUSG0C 1161.126222	-0.82294439	0.197034386	-4.176653672	2.95829E-05	0.000220029	NA
ENSMUSG0C 466.6818642	-2.556462132	0.612206338	-4.175817813	2.96917E-05	0.000220631	Acaa1b
ENSMUSG0C 114.5972549	-1.885830401	0.451657757	-4.175352627	2.97525E-05	0.000221013	D330041H03Rik
ENSMUSG0C 20.12734419	-1.845500054	0.442096633	-4.174426845	2.98737E-05	0.000221775	Dlgap3
ENSMUSG0C 9414.540291	-1.207787269	0.289326366	-4.174480487	2.98667E-05	0.000221775	Dsg2
ENSMUSG0C 211.3220648	-1.006158173	0.241042414	-4.174195564	2.99041E-05	0.000221931	2610005L07Rik
ENSMUSG0C 50.82287337	-1.794548812	0.429922939	-4.17411738	2.99144E-05	0.000221938	1810010H24Rik
ENSMUSG0C 119.6486786	-1.998851778	0.478888653	-4.173938482	2.99379E-05	0.000222043	Zmat4
ENSMUSG0C 2982.440771	-1.311814594	0.314294431	-4.173839761	2.99508E-05	0.00022207	Xiap
ENSMUSG0C 31.31503611	-1.763939347	0.422731163	-4.172721348	3.00983E-05	0.000223094	Zfp641
ENSMUSG0C 76.69098684	-1.22216016	0.292965639	-4.171684309	3.02356E-05	0.000223972	Map10
ENSMUSG0C 633.7168082	-0.789802753	0.189369076	-4.170706056	3.03657E-05	0.000224865	Whamm
ENSMUSG0C 773.6095824	-1.210147408	0.29016425	-4.170559974	3.03852E-05	0.00022494	Mob3c
ENSMUSG0C 4.710727221	-4.273001957	1.024897099	-4.169200949	3.05669E-05	0.000226144	Defa28
ENSMUSG0C 10.45315299	-2.489990798	0.597371047	-4.168248213	3.0695E-05	0.00022702	Caly
ENSMUSG0C 5.238209296	-3.640952388	0.873580764	-4.167848625	3.07488E-05	0.000227306	Lmo3
ENSMUSG0C 13092.22756	-0.876368122	0.210331724	-4.16659981	3.09177E-05	0.000228383	Tmem59
ENSMUSG0C 1077.15767	-1.146212106	0.275146524	-4.165824417	3.10229E-05	0.00022909	Narf
ENSMUSG0C 64.89065974	-1.193365379	0.286495452	-4.165390302	3.1082E-05	0.000229455	Abcb6
ENSMUSG0C 7152.758917	-1.236331344	0.296847704	-4.164867461	3.11533E-05	0.00022991	Gnai3
ENSMUSG0C 1195.493942	-1.126935146	0.270780422	-4.161804381	3.15743E-05	0.000232799	Ell

ENSMUSG0C 10191.87083	-1.979293115	0.47563335	-4.161384213	3.16324E-05	0.000233155	2200002D01Rik
ENSMUSG0C 2003.785637	-1.059559654	0.254660817	-4.160670135	3.17315E-05	0.000233813	Tmem94
ENSMUSG0C 39.70858196	-1.959794391	0.471124803	-4.159820031	3.18498E-05	0.00023454	Plag1
ENSMUSG0C 9.460293029	-3.400805225	0.817756355	-4.158702291	3.20061E-05	0.000235617	NA
ENSMUSG0C 1219.139561	-2.052195501	0.493485351	-4.158574306	3.2024E-05	0.000235676	Pm20d1
ENSMUSG0C 10.61529801	-3.068249583	0.738176428	-4.156526094	3.23123E-05	0.000237577	Galr1
ENSMUSG0C 1998.262141	-1.079543818	0.259731769	-4.156379563	3.2333E-05	0.000237602	Mtmt6
ENSMUSG0C 413.5523205	-1.11482315	0.268276818	-4.155495654	3.24583E-05	0.000238429	Lrrc61
ENSMUSG0C 2171.246601	-0.765206604	0.184220128	-4.153762195	3.27053E-05	0.000240021	Galnt10
ENSMUSG0C 18.95798673	-2.071314948	0.498675635	-4.153631746	3.2724E-05	0.000240084	NA
ENSMUSG0C 327.7586248	-2.099362206	0.505572817	-4.152442805	3.28945E-05	0.00024126	Gimap3
ENSMUSG0C 6.35024739	-3.23930559	0.780442835	-4.150599433	3.31606E-05	0.000242987	Epx
ENSMUSG0C 319.0414126	-1.639953328	0.395251579	-4.14913796	3.3373E-05	0.000244399	Aspg
ENSMUSG0C 17.20291643	-2.146385082	0.517462079	-4.147907972	3.35527E-05	0.000245633	NA
ENSMUSG0C 7446.223102	-1.937393501	0.467097618	-4.147727212	3.35792E-05	0.000245751	Slc25a24
ENSMUSG0C 2121.050449	-0.998180093	0.240664671	-4.147597104	3.35983E-05	0.000245815	Higd2a
ENSMUSG0C 1951.436431	-0.964672331	0.232693388	-4.145680033	3.38807E-05	0.000247778	Golim4
ENSMUSG0C 26.36906105	-1.784702932	0.430608184	-4.144609875	3.40393E-05	0.000248582	4933439K11Rik
ENSMUSG0C 152.2228837	-1.913438605	0.461719341	-4.14415952	3.41062E-05	0.000248994	Sh3bgr
ENSMUSG0C 3.453534588	-4.090834552	0.98771047	-4.141734525	3.44689E-05	0.000251565	Amer3
ENSMUSG0C 2082.628094	-0.710396304	0.171583664	-4.140232749	3.46954E-05	0.000253062	Kidins220
ENSMUSG0C 5398.409204	-2.255130087	0.54471359	-4.140029047	3.47262E-05	0.000253209	Mall
ENSMUSG0C 2922.403601	-1.187557975	0.286858517	-4.139873509	3.47497E-05	0.000253286	Tnfp1
ENSMUSG0C 536.2973914	-1.474622003	0.356216784	-4.139675812	3.47797E-05	0.000253288	Podn
ENSMUSG0C 60.64853015	-1.247523506	0.301366709	-4.139553137	3.47983E-05	0.000253346	NA
ENSMUSG0C 74.08165477	-1.67808153	0.405468165	-4.138627085	3.4939E-05	0.000254237	NA
ENSMUSG0C 531.10311	-1.001477878	0.241988669	-4.138532119	3.49535E-05	0.000254242	Vps13a
ENSMUSG0C 4003.842189	-2.660225655	0.643335846	-4.135049634	3.54878E-05	0.000257813	Clic5
ENSMUSG0C 7856.174596	-1.156419855	0.279695666	-4.134564805	3.55628E-05	0.000258279	Sdha
ENSMUSG0C 4888.899027	-2.077183137	0.502673831	-4.1322683	3.59201E-05	0.000260475	Fbp2
ENSMUSG0C 926.1060799	-1.453431523	0.351753574	-4.131959502	3.59684E-05	0.000260746	Plcl2
ENSMUSG0C 2192.009162	-1.026967044	0.248580091	-4.131332636	3.60666E-05	0.000261378	Dyrk1a
ENSMUSG0C 720.7207187	-1.114034413	0.269736034	-4.130091179	3.62619E-05	0.000262714	Tbc1d8b
ENSMUSG0C 30665.48575	-2.153605099	0.5214807	-4.129788697	3.63097E-05	0.000262979	Mgam
ENSMUSG0C 4.084172763	-3.813277302	0.923387497	-4.129660966	3.63299E-05	0.000263045	NA
ENSMUSG0C 2615.863537	-0.911302407	0.220786679	-4.127524419	3.6669E-05	0.000265258	Fcgrt
ENSMUSG0C 3020.623491	-1.343377259	0.325700694	-4.124575987	3.71418E-05	0.000268515	Tef
ENSMUSG0C 9.592371356	-2.749727224	0.666715477	-4.124288873	3.71882E-05	0.000268769	Ccdc146
ENSMUSG0C 60.48354568	-1.940985758	0.470690167	-4.123701525	3.72832E-05	0.000269291	NA
ENSMUSG0C 791.1084486	-0.6954091	0.168708957	-4.121945339	3.75686E-05	0.000271213	Crkl
ENSMUSG0C 63.67306588	-2.013022479	0.488369583	-4.121924359	3.75721E-05	0.000271213	Gpr17
ENSMUSG0C 772.4604261	-1.079067394	0.431703146	-4.121043382	3.7716E-05	0.000272004	Slco2b1
ENSMUSG0C 73.70730416	-2.649666569	0.643027764	-4.120609897	3.77871E-05	0.000272434	Syt4
ENSMUSG0C 9.165165518	-3.36206583	0.815947395	-4.120444344	3.78142E-05	0.000272547	Cyp2d12
ENSMUSG0C 48.17501805	-1.215039437	0.29500934	-4.118647349	3.81103E-05	0.000274431	Atl1
ENSMUSG0C 1794.658754	-1.386047239	0.336556512	-4.118319482	3.81645E-05	0.000274738	Nostrin
ENSMUSG0C 1521.244949	-0.775999264	0.188438386	-4.118053008	3.82087E-05	0.000274973	Phactr4
ENSMUSG0C 665.33467	-0.962553674	0.233895405	-4.115316736	3.86648E-05	0.000278003	Nudt16
ENSMUSG0C 2357.071959	-2.154880089	0.523813973	-4.113827046	3.89153E-05	0.000279635	Nr1i2
ENSMUSG0C 135.2156031	-1.088595283	0.264672334	-4.112992348	3.90563E-05	0.000280394	Cyb5d2
ENSMUSG0C 20.89753946	-2.458698568	0.597813035	-4.112821942	3.90852E-05	0.000280516	Cyp3a59
ENSMUSG0C 2078.307395	-1.44989265	0.352666318	-4.111230862	3.93555E-05	0.000282371	Tob1
ENSMUSG0C 1158.911966	-1.201055954	0.292173459	-4.110763371	3.94353E-05	0.000282858	Chchd7
ENSMUSG0C 62.41237061	-1.308128412	0.318240366	-4.110504364	3.94796E-05	0.000283029	A330023F24Rik
ENSMUSG0C 5878.614693	-0.799715795	0.194584872	-4.109855964	3.95906E-05	0.000283715	Scamp2
ENSMUSG0C 1513.367854	-1.34556054	0.327446237	-4.109256381	3.96935E-05	0.000284281	Eif4ebp2
ENSMUSG0C 879.8397919	-1.194032618	0.29066618	-4.107917256	3.99243E-05	0.000285761	Tepsin
ENSMUSG0C 1162.158752	-0.760357616	0.18510911	-4.107618558	3.9976E-05	0.000286045	Kmt2c
ENSMUSG0C 11148.3705	-3.241860251	0.789404891	-4.10671417	4.01327E-05	0.000286942	Slc15a1
ENSMUSG0C 1948.602534	-0.888297016	0.216305074	-4.106685996	4.01376E-05	0.000286942	Acap2
ENSMUSG0C 39.14555689	-1.943185207	0.47321452	-4.106351615	4.01957E-05	0.000287271	NA
ENSMUSG0C 5.139319332	-3.583287857	0.872763122	-4.105682019	4.03124E-05	0.000287845	Asic4
ENSMUSG0C 7.242724412	-2.769329045	0.674505402	-4.105718112	4.03061E-05	0.000287845	NA
ENSMUSG0C 319.8778242	-2.648236701	0.645339071	-4.103636089	4.06707E-05	0.000290229	Odf3b
ENSMUSG0C 2128.310642	-1.093380008	0.266469002	-4.103216517	4.07446E-05	0.000290582	Rnf13
ENSMUSG0C 462.8732629	-0.83773914	0.204347193	-4.099587219	4.13888E-05	0.000294734	Cdadcl
ENSMUSG0C 5.541329043	-3.068117872	0.748521098	-4.098906339	4.15107E-05	0.000295425	Gabrg2



ENSMUSG0C 1302.458492	-0.9567424	0.233436306	-4.098515848	4.15808E-05	0.00029579	Itpkc
ENSMUSG0C 1141.229161	-1.368440471	0.333907335	-4.098264177	4.1626E-05	0.000295979	Tns2
ENSMUSG0C 163.3153167	-1.006744546	0.245756126	-4.096518623	4.1941E-05	0.00029813	Rgs7bp
ENSMUSG0C 12.44072315	-2.071577026	0.505909974	-4.094754268	4.22616E-05	0.00030005	NA
ENSMUSG0C 30.4792475	-2.1473244	0.524647771	-4.092887684	4.26034E-05	0.000302261	Slc8a3
ENSMUSG0C 13.79415811	-2.871617561	0.701618948	-4.092844937	4.26113E-05	0.000302261	NA
ENSMUSG0C 101.9183187	-1.495872225	0.365564553	-4.091950966	4.27759E-05	0.000303339	Pygm
ENSMUSG0C 1211.661407	-1.928321581	0.471256068	-4.091876401	4.27897E-05	0.000303346	Fmo2
ENSMUSG0C 1512.710262	-1.340465329	0.327709659	-4.090405306	4.3062E-05	0.000305094	Ddhd2
ENSMUSG0C 58.90010972	-1.772627609	0.433488509	-4.08921476	4.32836E-05	0.000306481	Gm10433
ENSMUSG0C 1553.088471	-1.329123787	0.325049559	-4.088988126	4.33259E-05	0.00030669	Mfsd14b
ENSMUSG0C 84109.54076	-1.320276734	0.32292507	-4.088492521	4.34186E-05	0.000307254	Krt8
ENSMUSG0C 3927.380042	-2.777466442	0.679370233	-4.08829576	4.34554E-05	0.000307423	Dpyd
ENSMUSG0C 612.5313882	-2.187859803	0.535253976	-4.087517142	4.36014E-05	0.000308364	NA
ENSMUSG0C 1271.019893	-1.029606811	0.25204481	-4.085014921	4.4074E-05	0.000311336	Plpp6
ENSMUSG0C 13.7135951	-2.340031712	0.572976772	-4.083990531	4.42688E-05	0.00031234	Fibcd1
ENSMUSG0C 1912.178774	-0.935846473	0.229195561	-4.083178881	4.44238E-05	0.000313248	Slc30a5
ENSMUSG0C 26.35390782	-1.879658017	0.460585669	-4.081017153	4.4839E-05	0.000315988	Mum11
ENSMUSG0C 69915.85955	-2.680876305	0.65694706	-4.080810263	4.4879E-05	0.000316082	Apob
ENSMUSG0C 55.47844144	-2.236860767	0.548136788	-4.080844079	4.48724E-05	0.000316082	Sertm1
ENSMUSG0C 331.7978559	-0.744150549	0.182398487	-4.079806584	4.50732E-05	0.000317215	Lrrc57
ENSMUSG0C 29.75132406	-2.862012038	0.701512676	-4.079772378	4.50798E-05	0.000317215	NA
ENSMUSG0C 1113.470403	-1.322066335	0.324311657	-4.076530424	4.57127E-05	0.000321382	Pgm3
ENSMUSG0C 447.8811774	-1.473940942	0.361839049	-4.073471196	4.63176E-05	0.000325442	Cacna1h
ENSMUSG0C 35.672842	-1.581765233	0.388341564	-4.073128863	4.63857E-05	0.000325825	B230216N24Rik
ENSMUSG0C 25.47099804	-2.624198059	0.644506961	-4.071636488	4.6684E-05	0.000327766	Serpnb1c
ENSMUSG0C 72.53879555	-1.293307965	0.317756179	-4.070126877	4.69875E-05	0.000329468	Tpbgl
ENSMUSG0C 113.825795	-1.39347904	0.342387799	-4.069885214	4.70363E-05	0.000329615	Myrip
ENSMUSG0C 78.36388433	-2.05001302	0.503696802	-4.069934555	4.70263E-05	0.000329615	Klrb1b
ENSMUSG0C 47.49502262	-2.593286099	0.637301521	-4.069166656	4.71816E-05	0.000330535	Eif4ebp3
ENSMUSG0C 25.5341482	-1.694785077	0.416547161	-4.068651128	4.72861E-05	0.000331072	Olfr1423
ENSMUSG0C 117.0467419	-1.780517488	0.437877575	-4.066244969	4.77767E-05	0.00033431	Celf3
ENSMUSG0C 633.2930719	-2.210518667	0.543711783	-4.065607437	4.79075E-05	0.000335127	lyd
ENSMUSG0C 29666.6916	-2.04007255	0.502130895	-4.062830171	4.84813E-05	0.000338742	Cdh17
ENSMUSG0C 1958.539825	-0.940709126	0.231594127	-4.0618868	4.86777E-05	0.000339814	Vps26a
ENSMUSG0C 36.06309677	-2.784592349	0.685824877	-4.060209017	4.90288E-05	0.000342064	Ceacam2
ENSMUSG0C 1918.849847	-0.952384129	0.234618863	-4.05928201	4.92238E-05	0.000343223	Ralgapa2
ENSMUSG0C 765.4219587	-1.011074797	0.249283577	-4.055922216	4.99369E-05	0.000347583	Mtmr1
ENSMUSG0C 1746.467193	-0.851931964	0.210044426	-4.055960826	4.99286E-05	0.000347583	Hmgcl
ENSMUSG0C 141.0439719	-1.877397291	0.462956421	-4.055235452	5.00838E-05	0.000348504	Gpr20
ENSMUSG0C 487.5084498	-1.093927162	0.269807531	-4.054472304	5.02476E-05	0.000349234	Oxsm
ENSMUSG0C 69.87851453	-1.276586106	0.314883919	-4.054148297	5.03173E-05	0.000349616	Nrip3
ENSMUSG0C 48.27865296	-1.843990816	0.454954468	-4.053132668	5.05363E-05	0.000351035	Kcnq3
ENSMUSG0C 14.4414061	-2.318981285	0.572180024	-4.052887533	5.05893E-05	0.000351301	1700121L16Rik
ENSMUSG0C 2982.818767	-0.816405437	0.201536466	-4.050906775	5.10195E-05	0.000354185	Hook2
ENSMUSG0C 1909.462034	-0.942878331	0.232820264	-4.049812146	5.12588E-05	0.000355638	Zdhhc7
ENSMUSG0C 610.8537063	-1.878400581	0.463853178	-4.049558503	5.13143E-05	0.000355919	Dpt
ENSMUSG0C 15356.6623	-2.288053161	0.565137102	-4.048669166	5.15097E-05	0.000357066	NA
ENSMUSG0C 13248.48089	-1.52971954	0.377983949	-4.047048943	5.18674E-05	0.000358934	Tspan8
ENSMUSG0C 53.34006919	-1.397927341	0.345463124	-4.046531287	5.19822E-05	0.000359606	Tmem130
ENSMUSG0C 46265.21943	-3.048086591	0.753342679	-4.04608245	5.20819E-05	0.000360191	Ace2
ENSMUSG0C 40.38854137	-3.490434658	0.863060458	-4.044252783	5.24903E-05	0.000362804	NA
ENSMUSG0C 2369.14107	-2.015490416	0.498621158	-4.04212774	5.29684E-05	0.000365896	Cyp27a1
ENSMUSG0C 2694.011541	-2.366725192	0.58558791	-4.04162236	5.30827E-05	0.000366579	Nipal1
ENSMUSG0C 239.0371259	-1.138066177	0.28162491	-4.041070713	5.32077E-05	0.000367336	Zfp995
ENSMUSG0C 983.2347787	-1.578790725	0.390707288	-4.040853022	5.32571E-05	0.00036757	Osgin1
ENSMUSG0C 3053.096339	-1.366488884	0.338193068	-4.040558522	5.33241E-05	0.000367925	Aldh1l1
ENSMUSG0C 1352.786849	-1.269654627	0.314320891	-4.039358065	5.35977E-05	0.000369491	Gpr89
ENSMUSG0C 183.4837811	-1.019288889	0.252361501	-4.039003122	5.36789E-05	0.000369943	Adcy9
ENSMUSG0C 1563.468797	-1.118479765	0.276934968	-4.038781278	5.37296E-05	0.000370186	Tbc1d22a
ENSMUSG0C 1081.479858	-0.640646584	0.158639588	-4.038377772	5.38221E-05	0.000370608	Ghr
ENSMUSG0C 1072.988102	-0.955773009	0.236669271	-4.038433056	5.38094E-05	0.000370608	Dennd1b
ENSMUSG0C 34.05202645	-2.744876249	0.679997674	-4.036596526	5.42322E-05	0.000373108	Cyt11
ENSMUSG0C 103.8083132	-2.308383575	0.571987828	-4.035721502	5.44348E-05	0.000374284	Itih3
ENSMUSG0C 2268.918743	-1.595044231	0.395319326	-4.034824823	5.4643E-05	0.000375499	Fam109a
ENSMUSG0C 1874.890957	-1.020686946	0.253026718	-4.033909749	5.48564E-05	0.000376638	Etl4
ENSMUSG0C 22.55231269	-3.497220208	0.867425875	-4.03172226	5.53696E-05	0.000380052	NA



ENSMUSG0C 305.9139734	-1.803658189	0.447458266	-4.030897015	5.55644E-05	0.000381279	Itpka
ENSMUSG0C 7282.570401	-1.362335001	0.338005236	-4.030514485	5.56549E-05	0.000381679	Abcd3
ENSMUSG0C 1117.441914	-2.672765604	0.663124962	-4.030560991	5.56439E-05	0.000381679	Cyp4f40
ENSMUSG0C 5.346052278	-4.236223399	1.051266263	-4.029638871	5.58626E-05	0.000382993	NA
ENSMUSG0C 3248.857197	-1.189394586	0.295289401	-4.027894606	5.62786E-05	0.000385511	Ppp4r1
ENSMUSG0C 2124.454212	-1.559587377	0.387215858	-4.027695007	5.63263E-05	0.000385628	Adck5
ENSMUSG0C 1128.528844	-2.862158894	0.710620819	-4.027687928	5.6328E-05	0.000385628	Ugt1a1
ENSMUSG0C 4036.052708	-2.434273399	0.604757189	-4.025207877	5.6925E-05	0.000389266	Hkdc1
ENSMUSG0C 187.5163562	-2.440016929	0.60639601	-4.023801092	5.72663E-05	0.000391375	Scn7a
ENSMUSG0C 342.9830391	-1.748214732	0.434497827	-4.02352929	5.73325E-05	0.000391714	Reln
ENSMUSG0C 1069.353245	-0.791040055	0.196640417	-4.022774496	5.75166E-05	0.000392789	Ttc17
ENSMUSG0C 382.1471033	-0.94990924	0.349606903	-4.018773408	5.85019E-05	0.000398602	Slc25a42
ENSMUSG0C 1704.511374	-1.038629426	0.258437944	-4.018873586	5.8477E-05	0.000398602	Ier5
ENSMUSG0C 693.1516274	-2.983983761	0.742674046	-4.017891531	5.87212E-05	0.000399937	Unc93a
ENSMUSG0C 1627.60148	-0.733709927	0.182719605	-4.01549646	5.93208E-05	0.000403443	Efcab14
ENSMUSG0C 2026.902475	-0.836725915	0.208373421	-4.015511728	5.93169E-05	0.000403443	Zdhhc9
ENSMUSG0C 99.67617869	-1.621053618	0.403770314	-4.014791486	5.94984E-05	0.000404419	Hoxc6
ENSMUSG0C 4587.053165	-0.998652545	0.249032785	-4.010124793	6.06867E-05	0.000412024	Tmem131
ENSMUSG0C 945.939456	-1.006961905	0.251129234	-4.009735895	6.07867E-05	0.000412468	Siae
ENSMUSG0C 3079.20884	-0.797819912	0.199002101	-4.009102955	6.09498E-05	0.000413338	Mgrn1
ENSMUSG0C 30.27090329	-1.83531847	0.45810849	-4.006296569	6.16782E-05	0.000418096	NA
ENSMUSG0C 4546.504638	-1.308646128	0.326799137	-4.004435695	6.21657E-05	0.000421103	Rbm47
ENSMUSG0C 77.86490629	-2.963134192	0.739991204	-4.00428299	6.22059E-05	0.000421255	NA
ENSMUSG0C 2222.277645	-1.125418576	0.281207343	-4.002095272	6.2784E-05	0.000424807	Sacm1l
ENSMUSG0C 4133.309002	-2.051743033	0.512831316	-4.000814634	6.31248E-05	0.000426627	Vipr1
ENSMUSG0C 195.3924411	-1.18020069	0.295002795	-4.0006424	6.31708E-05	0.000426816	Kyat3
ENSMUSG0C 305.7654525	-2.827017774	0.70686432	-3.999378233	6.35091E-05	0.000428858	Hoxb6
ENSMUSG0C 9490.3265	-0.715763805	0.179003006	-3.998613333	6.37147E-05	0.000430124	Copa
ENSMUSG0C 9475.498296	-2.571852028	0.643253423	-3.99819408	6.38276E-05	0.000430764	Ggt1
ENSMUSG0C 1792.713875	-2.649143849	0.662778817	-3.997025527	6.41434E-05	0.000432717	Rab30
ENSMUSG0C 1523.926372	-1.053835115	0.263741705	-3.995709034	6.45009E-05	0.000434729	D1Ertdd622e
ENSMUSG0C 2299.158105	-2.293194156	0.573940748	-3.995524211	6.45513E-05	0.000434906	Naip1
ENSMUSG0C 46.57736263	-2.172396173	0.543789846	-3.994918603	6.47165E-05	0.000435896	Trpc4
ENSMUSG0C 3667.844386	-1.146955789	0.287205472	-3.993502566	6.51044E-05	0.00043826	Tsc22d3
ENSMUSG0C 32.89801733	-1.849632811	0.463266291	-3.992590972	6.53552E-05	0.000439575	Hrc
ENSMUSG0C 417.8283667	-1.736621841	0.435710789	-3.985721461	6.72754E-05	0.000451595	Tnfsf10
ENSMUSG0C 20.44684129	-2.318676583	0.581783126	-3.985465508	6.7348E-05	0.000451954	NA
ENSMUSG0C 425.0785756	-0.81314328	0.204033839	-3.985335393	6.73849E-05	0.000452074	Mfsd13a
ENSMUSG0C 1286.106016	-0.716232252	0.17981202	-3.983227874	6.79855E-05	0.000455846	Zfp592
ENSMUSG0C 1643.441227	-0.645443906	0.162079077	-3.982277784	6.82579E-05	0.000457544	Vav2
ENSMUSG0C 916.9854073	-2.702241814	0.678613188	-3.982006044	6.8336E-05	0.000457809	Pdzd3
ENSMUSG0C 7.854451879	-2.931158081	0.736512278	-3.979781694	6.89786E-05	0.000461853	Tmem169
ENSMUSG0C 28.01153307	-1.535335061	0.385865163	-3.97894189	6.92227E-05	0.000463231	9330159F19Rik
ENSMUSG0C 1324.471585	-1.191828321	0.299534152	-3.978939677	6.92233E-05	0.000463231	Metrl
ENSMUSG0C 4191.225695	-0.738721485	0.185748344	-3.97700173	6.97897E-05	0.000466758	Rab8a
ENSMUSG0C 156.3219839	-0.780824563	0.196411322	-3.975455978	7.02445E-05	0.000469355	Dynlt1c
ENSMUSG0C 807.1687273	-1.483746085	0.373228337	-3.975437922	7.02499E-05	0.000469355	Rwdd2b
ENSMUSG0C 10.9854751	-2.415375777	0.607745466	-3.974321341	7.05802E-05	0.000471249	Mmd2
ENSMUSG0C 8105.347498	-2.731011269	0.687312791	-3.973462014	7.08355E-05	0.000472687	Hpgd
ENSMUSG0C 1243.380224	-1.187841049	0.299070945	-3.971770138	7.13405E-05	0.000475791	Lpar1
ENSMUSG0C 2091.778737	-0.791450196	0.199274119	-3.971665769	7.13718E-05	0.000475865	Acvr1b
ENSMUSG0C 325.4178788	-0.877977598	0.221118587	-3.970618709	7.16862E-05	0.00047756	Wdr44
ENSMUSG0C 1539.490651	-1.012764917	0.255069933	-3.970538214	7.17105E-05	0.000477587	Setd7
ENSMUSG0C 786.1736713	-1.198086517	0.301788108	-3.969959341	7.18849E-05	0.000478481	Fam110c
ENSMUSG0C 5373.035448	-0.865970351	0.218148144	-3.969643442	7.19803E-05	0.000478981	Gak
ENSMUSG0C 20.01476788	-2.011784818	0.506865361	-3.969071417	7.21533E-05	0.000479845	Phospho1
ENSMUSG0C 8455.694739	-1.100615803	0.277324134	-3.968698238	7.22663E-05	0.000480347	Ctdsp2
ENSMUSG0C 11.49531417	-2.192064521	0.552352066	-3.968600203	7.22961E-05	0.00048041	Diras1
ENSMUSG0C 1787.068863	-1.263960867	0.31872285	-3.965705215	7.31793E-05	0.0004856	Plpp3
ENSMUSG0C 117.1611989	-1.907293927	0.480976968	-3.965457919	7.32552E-05	0.000485968	P2rx1
ENSMUSG0C 103.348541	-2.421344308	0.61080125	-3.964209813	7.36395E-05	0.000488381	Nxph3
ENSMUSG0C 1343.898064	-1.157984763	0.292146327	-3.963714944	7.37924E-05	0.000489121	Panx1
ENSMUSG0C 787.5776675	-0.896533588	0.226192376	-3.963588882	7.38314E-05	0.000489243	L2hgdh
ENSMUSG0C 786.4892359	-1.210336823	0.305378386	-3.963400417	7.38897E-05	0.000489493	Aldh6a1
ENSMUSG0C 97.43853266	-1.716629751	0.433238256	-3.962322638	7.42241E-05	0.000491572	Nacad
ENSMUSG0C 3080.2289	-1.003919005	0.25340184	-3.961766835	7.43972E-05	0.000492581	Hadhb
ENSMUSG0C 44.75573927	-1.422436371	0.359120705	-3.960886548	7.4672E-05	0.000494263	Tgfb3l

ENSMUSG0C 1087.342399	-1.093836274	0.276188155	-3.960474965	7.48008E-05	0.000494977	Cnksr1
ENSMUSG0C 2867.739832	-2.144186033	0.541590868	-3.959051303	7.52481E-05	0.000497568	Nlrp6
ENSMUSG0C 187.0284892	-1.334433856	0.3372071	-3.957312446	7.57978E-05	0.000500737	Pcsk1n
ENSMUSG0C 1959.604916	-1.559738518	0.39431866	-3.955528045	7.63658E-05	0.000503929	Ddah1
ENSMUSG0C 521.9538147	-1.420140254	0.359157179	-3.954091233	7.68261E-05	0.000506664	Nat2
ENSMUSG0C 1649.088886	-0.849166008	0.214803662	-3.953219412	7.71067E-05	0.000508254	Prr14
ENSMUSG0C 1130.329438	-0.992611949	0.251352666	-3.94980652	7.84519E-05	0.000516261	Marveld3
ENSMUSG0C 631.7706885	-0.566399388	0.143455611	-3.948255377	7.87228E-05	0.000517327	Cryzl1
ENSMUSG0C 1610.317909	-1.544153854	0.391086876	-3.948365308	7.86867E-05	0.000517327	Cdkn2b
ENSMUSG0C 2235.787473	-2.721539645	0.689519067	-3.947011438	7.91328E-05	0.000519878	Car4
ENSMUSG0C 3134.457104	-1.138882801	0.288628928	-3.945837342	7.95216E-05	0.000522143	Jak2
ENSMUSG0C 631.2409576	-1.084078409	0.274775944	-3.945317749	7.96942E-05	0.000523132	Per3
ENSMUSG0C 13.24484356	-1.945118635	0.493080782	-3.944827514	7.98574E-05	0.000524059	9630028B13Rik
ENSMUSG0C 1198.914481	-0.98271108	0.249176662	-3.943832748	8.01896E-05	0.000525803	Mst1r
ENSMUSG0C 315.7271852	-0.775384425	0.196605961	-3.94385002	8.01838E-05	0.000525803	Hdac10
ENSMUSG0C 12.57519719	-3.481924031	0.883033643	-3.943138588	8.04221E-05	0.000527182	Spaca7
ENSMUSG0C 750.4226027	-1.005405261	0.255090759	-3.941362924	8.10199E-05	0.000530954	Selo
ENSMUSG0C 4.839295966	-3.183008601	0.807804993	-3.940318056	8.13736E-05	0.000532538	Vmn1r139
ENSMUSG0C 5605.461361	-2.5532236	0.648018958	-3.940044606	8.14665E-05	0.000532971	Gpt
ENSMUSG0C 19.90786372	-1.639462861	0.416115261	-3.93992486	8.15071E-05	0.000532971	Shisa6
ENSMUSG0C 297.2762886	-1.73958278	0.441569642	-3.93954343	8.16368E-05	0.000533379	Mfsd7a
ENSMUSG0C 11.39593395	-2.088450176	0.530261852	-3.938526163	8.19837E-05	0.00053535	NA
ENSMUSG0C 670.2151188	-0.759264714	0.192849048	-3.937093408	8.24745E-05	0.000537964	Mtmt7
ENSMUSG0C 10.25126966	-2.171088663	0.551743164	-3.934962503	8.32097E-05	0.000542313	Cd226
ENSMUSG0C 1337.185559	-0.826540119	0.210089965	-3.934219892	8.34673E-05	0.000543694	Wrnip1
ENSMUSG0C 39.15703387	-1.590711209	0.40436714	-3.933829066	8.36032E-05	0.000544131	Trim72
ENSMUSG0C 176.0305418	-1.033645368	0.262763179	-3.933752711	8.36298E-05	0.000544155	Tmem38a
ENSMUSG0C 67.81838098	-1.958328939	0.497962013	-3.932687412	8.40014E-05	0.000546224	Baiap3
ENSMUSG0C 5277.054749	-0.922078547	0.234572096	-3.930896135	8.46298E-05	0.000549758	Tmc4
ENSMUSG0C 6.650833516	-3.447200438	0.876977371	-3.930774672	8.46726E-05	0.000549886	1190028D05Rik
ENSMUSG0C 1805.524354	-1.02212803	0.260043499	-3.930604046	8.47327E-05	0.000550126	Atg4d
ENSMUSG0C 2752.438063	-2.847019167	0.725075502	-3.926514082	8.61858E-05	0.000558644	Mgat4c
ENSMUSG0C 44.3438713	-2.326263478	0.59260733	-3.925471994	8.65598E-05	0.000560762	Ttll2
ENSMUSG0C 8425.089668	-3.066878188	0.781571475	-3.923989404	8.70946E-05	0.000563765	Sult1d1
ENSMUSG0C 14.91841042	-1.661367159	0.423722801	-3.920882134	8.82254E-05	0.000570171	Pcdhgc4
ENSMUSG0C 678.1213012	-2.91214769	0.742729102	-3.920874624	8.82282E-05	0.000570171	Hsd3b3
ENSMUSG0C 2788.546652	-0.799573042	0.203948786	-3.920459916	8.83801E-05	0.000570974	Pex19
ENSMUSG0C 978.768421	-2.630238962	0.670910132	-3.920404293	8.84005E-05	0.000570974	Tubal3
ENSMUSG0C 109958.3582	-2.409257851	0.61457491	-3.920202095	8.84747E-05	0.000571298	Reg3b
ENSMUSG0C 292.1428061	-3.145926124	0.802837136	-3.918510969	8.90977E-05	0.000575008	Fam151a
ENSMUSG0C 1295.316998	-2.597917866	0.663116676	-3.917738705	8.93835E-05	0.000576539	Gdpd2
ENSMUSG0C 62.1280568	-1.457846097	0.372244001	-3.916372303	8.98914E-05	0.000579501	Fbxl21
ENSMUSG0C 743.5605563	-0.79897576	0.204023295	-3.916100657	8.99927E-05	0.000579996	Ap5s1
ENSMUSG0C 4.830558031	-3.192978348	0.815522766	-3.915253479	9.03093E-05	0.000581721	NA
ENSMUSG0C 62.9875826	-1.205170315	0.307849033	-3.914809484	9.04756E-05	0.000582635	Mill2
ENSMUSG0C 685.0139871	-1.845522919	0.471464161	-3.914450074	9.06105E-05	0.000583345	Gcnt1
ENSMUSG0C 369.868486	-0.988660253	0.252638065	-3.913346363	9.10258E-05	0.000585384	Sept6
ENSMUSG0C 2561.655198	-0.89171783	0.228014679	-3.910791322	9.19942E-05	0.000590972	Neo1
ENSMUSG0C 5.884174159	-2.717288658	0.694960468	-3.909990255	9.22998E-05	0.000592775	Dnah9
ENSMUSG0C 23.37071366	-1.736706301	0.444369188	-3.90825095	9.29667E-05	0.000596897	NA
ENSMUSG0C 93668.37213	-0.895247772	0.229084699	-3.907933517	9.30889E-05	0.00059752	Actb
ENSMUSG0C 1560.413143	-0.758013838	0.193973957	-3.907812412	9.31356E-05	0.000597658	Snx13
ENSMUSG0C 20.46561176	-1.445793553	0.370065861	-3.906854716	9.35053E-05	0.000599545	NA
ENSMUSG0C 3561.28767	-0.63330088	0.162109993	-3.906612235	9.35992E-05	0.000599984	Ctdsp1
ENSMUSG0C 29.02167587	-1.573045981	0.402712551	-3.906126041	9.37876E-05	0.000600868	NA
ENSMUSG0C 37948.24989	-1.052508933	0.269513582	-3.905216663	9.4141E-05	0.000602969	Dstn
ENSMUSG0C 9.451861985	-2.164961393	0.554388096	-3.905136868	9.41721E-05	0.000603006	NA
ENSMUSG0C 61.94555653	-2.066837783	0.529676179	-3.902078038	9.53704E-05	0.000610021	NA
ENSMUSG0C 139.8857783	-2.524544399	0.647060473	-3.90155867	9.55753E-05	0.000611167	Prkag3
ENSMUSG0C 1145.766927	-1.041189833	0.266875946	-3.901400069	9.56379E-05	0.000611403	Rab11fip3
ENSMUSG0C 12.69563065	-1.800453442	0.461562448	-3.900779734	9.58834E-05	0.000612807	NA
ENSMUSG0C 1698.052736	-1.203395374	0.308585873	-3.899709867	9.6308E-05	0.000615356	Eci2
ENSMUSG0C 7203.055496	-1.063143009	0.272697941	-3.89861033	9.67463E-05	0.000617824	Epb41l4b
ENSMUSG0C 472.5820315	-2.483268437	0.637134449	-3.897557953	9.71676E-05	0.000620181	Ccl28
ENSMUSG0C 2644.226973	-0.877511388	0.225188145	-3.896792121	9.74752E-05	0.000621643	Aff1
ENSMUSG0C 7.703116252	-2.981592846	0.765367515	-3.895635477	9.79416E-05	0.000623948	NA
ENSMUSG0C 4826.855073	-1.051804447	0.27019721	-3.892728745	9.9123E-05	0.000630966	Ankrd13a

ENSMUSG0C 3257.869792	-2.566106757	0.659284578	-3.892259642	9.93149E-05	0.000631849	Adgrg7
ENSMUSG0C 33.78347799	-2.169707518	0.557432762	-3.892321487	9.92896E-05	0.000631849	Cbln2
ENSMUSG0C 1818.184322	-1.351891898	0.34735764	-3.891930795	9.94496E-05	0.000632368	Acbd4
ENSMUSG0C 172.660265	-3.080557224	0.791776578	-3.89069001	9.99596E-05	0.000634761	Olf165
ENSMUSG0C 889.5342953	-0.874747179	0.224872605	-3.889967734	0.000100258	0.000636483	Fbxo6
ENSMUSG0C 73.99754653	-1.744287774	0.448419374	-3.889858194	0.000100303	0.000636488	Stx1b
ENSMUSG0C 155.1838495	-1.677566864	0.43142079	-3.888470152	0.000100878	0.000639738	Capn8
ENSMUSG0C 139.1009898	-1.694400992	0.436036599	-3.885914612	0.000101945	0.000646162	Trim7
ENSMUSG0C 1898.84209	-2.19371419	0.56458213	-3.88555371	0.000102097	0.00064695	Soat2
ENSMUSG0C 1617.990636	-1.854322785	0.477293541	-3.885078309	0.000102297	0.000647871	Agmo
ENSMUSG0C 218.0066774	-1.425055664	0.36682989	-3.884786122	0.00010242	0.000648478	Tmem220
ENSMUSG0C 11.48072215	-1.994235007	0.513361753	-3.884658326	0.000102474	0.000648646	Gm7854
ENSMUSG0C 653.9103218	-1.375932887	0.354335595	-3.883134817	0.000103118	0.000652548	Myzap
ENSMUSG0C 14.83165777	-1.718039116	0.442443353	-3.883071363	0.000103145	0.000652548	Fam19a1
ENSMUSG0C 10.0044879	-2.096853934	0.540113357	-3.882247879	0.000103495	0.000654588	Spata22
ENSMUSG0C 651.7034584	-2.325299442	0.599050641	-3.881640853	0.000103754	0.000655876	Pipox
ENSMUSG0C 13.42392184	-2.687958598	0.693397772	-3.876503081	0.000105968	0.000669162	Atp2b3
ENSMUSG0C 253.1306605	-3.129899189	0.807544977	-3.87582027	0.000106266	0.000670685	Gm11437
ENSMUSG0C 4025.762911	-2.470396388	0.637614001	-3.874438743	0.000106871	0.000673964	Pdk4
ENSMUSG0C 4761.821628	-1.587973784	0.409879204	-3.874248241	0.000106954	0.000674312	Calml4
ENSMUSG0C 29.01536273	-1.161170056	0.299921757	-3.871576601	0.000108134	0.000681024	Zfp955b
ENSMUSG0C 816.3418765	-1.457784793	0.376566035	-3.871259369	0.000108275	0.000681623	Tgfb1i1
ENSMUSG0C 568.9330858	-1.038128286	0.268164754	-3.871233152	0.000108286	0.000681623	Secisbp2
ENSMUSG0C 68.95310578	-1.657877341	0.428460655	-3.86938059	0.000109112	0.000685914	Camk2a
ENSMUSG0C 1073.736402	-0.810769746	0.209611802	-3.867958475	0.00010975	0.000689561	Stard3nl
ENSMUSG0C 411.0679677	-2.628897137	0.680301068	-3.864314289	0.000111402	0.000698827	Mmrn1
ENSMUSG0C 2014.990953	-1.66654593	0.43139345	-3.863169291	0.000111925	0.000701742	Retsat
ENSMUSG0C 66.36177977	-2.353347742	0.609222088	-3.862873304	0.000112061	0.000702407	Sycn
ENSMUSG0C 1050.648901	-2.349630532	0.608319373	-3.86249499	0.000112235	0.00070294	Fmo4
ENSMUSG0C 544.4674177	-2.309385315	0.597934095	-3.862274009	0.000112336	0.000703391	Gchfr
ENSMUSG0C 5471.925376	-0.690246477	0.178723487	-3.862091585	0.00011242	0.000703731	Sec24c
ENSMUSG0C 4915.007481	-1.08342031	0.28061104	-3.8609326	0.000112955	0.000706333	Slc25a10
ENSMUSG0C 250.6634779	-2.668001344	0.691017719	-3.86097385	0.000112936	0.000706333	Upk3b
ENSMUSG0C 158.1491836	-2.841707246	0.736065551	-3.860671432	0.000113076	0.000706903	Als2cr12
ENSMUSG0C 62.27521982	-1.528482616	0.396140431	-3.858436294	0.000114115	0.000712648	Stk32c
ENSMUSG0C 21.51757474	-2.434391025	0.630917432	-3.858493839	0.000114088	0.000712648	Gm7030
ENSMUSG0C 316.5672423	-2.433324914	0.63114522	-3.855412093	0.000115535	0.000720758	Tinag
ENSMUSG0C 3110.024108	-1.259128113	0.326822133	-3.852640275	0.000116851	0.000728395	Hist1h1c
ENSMUSG0C 6943.465224	-1.645831958	0.427211896	-3.852495622	0.00011692	0.000728634	Tmem45b
ENSMUSG0C 16.31174183	-1.920942215	0.498671484	-3.852119632	0.0001171	0.000729563	NA
ENSMUSG0C 1407.779322	-1.360969458	0.353344999	-3.851673185	0.000117314	0.000730511	Peli1
ENSMUSG0C 3.263784781	-3.92767162	1.019728115	-3.851685133	0.000117308	0.000730511	NA
ENSMUSG0C 1031.439172	-0.738711911	0.191808871	-3.851291682	0.000117496	0.000731267	Ppp2r5b
ENSMUSG0C 5969.868831	-1.447538346	0.375982185	-3.850018445	0.000118109	0.000734502	Perp
ENSMUSG0C 391.0966143	-0.775856644	0.201553636	-3.849380545	0.000118417	0.000736089	Macrod1
ENSMUSG0C 1394.279661	-0.841023397	0.218487515	-3.849297272	0.000118457	0.000736089	Gigyf2
ENSMUSG0C 23.77565918	-2.493525175	0.647777652	-3.849353503	0.00011843	0.000736089	Pcdh15
ENSMUSG0C 896.0463802	-0.847480995	0.220176146	-3.849104499	0.00011855	0.000736476	Stk35
ENSMUSG0C 1807.914557	-1.745199418	0.453458263	-3.848643985	0.000118773	0.000737476	Hbegf
ENSMUSG0C 19.31982885	-1.873854167	0.487009391	-3.847675633	0.000119244	0.000740009	NA
ENSMUSG0C 46.47637838	-1.543246035	0.401439575	-3.844279764	0.000120907	0.000749548	Abcc8
ENSMUSG0C 12.79028363	-2.362858662	0.614904734	-3.842641847	0.000121717	0.000753782	2010106C02Rik
ENSMUSG0C 1980.483212	-0.664372427	0.172950361	-3.841405264	0.000122332	0.000757393	Igfbp1
ENSMUSG0C 2349.253284	-2.800045296	0.728985366	-3.841017152	0.000122526	0.000758394	Slc6a4
ENSMUSG0C 9.886711512	-2.241840025	0.583808731	-3.840024836	0.000123022	0.00076107	NA
ENSMUSG0C 2167.734406	-2.610448408	0.679942993	-3.839216573	0.000123428	0.00076338	Hnf4g
ENSMUSG0C 5124.002213	-1.130268265	0.29443307	-3.83879523	0.000123639	0.000764492	Myo6
ENSMUSG0C 5.914661384	-2.527254647	0.658362798	-3.838696011	0.000123689	0.000764602	A530099J19Rik
ENSMUSG0C 910.0743322	-1.552578826	0.404640152	-3.836937134	0.000124578	0.000769567	Cldn23
ENSMUSG0C 4260.342004	-2.633732131	0.686447641	-3.836756036	0.00012467	0.000769837	Tmem236
ENSMUSG0C 33.1983875	-1.422128793	0.370862905	-3.834648263	0.000125744	0.000775524	Gm7967
ENSMUSG0C 1529.69611	-1.247836587	0.325607781	-3.832330363	0.000126935	0.000782426	Nipsnap3b
ENSMUSG0C 11.63471167	-1.843025433	0.481012868	-3.831551203	0.000127338	0.000784705	NA
ENSMUSG0C 1200.165509	-0.59232206	0.154690378	-3.829081485	0.000128622	0.000792005	Ankhd1
ENSMUSG0C 49.93272671	-2.128319596	0.555969192	-3.828125057	0.000129123	0.000794676	Kcnab1
ENSMUSG0C 142.6009898	-1.871926481	0.489238941	-3.826200911	0.000130136	0.000800081	Ndn
ENSMUSG0C 1042.545012	-0.917734292	0.239862768	-3.826080642	0.0001302	0.000800265	Ssx2ip

ENSMUSG0C 693.163063	-1.309076048	0.342200658	-3.825463273	0.000130526	0.000802033	Reps2
ENSMUSG0C 91.47654684	-2.768881901	0.723844438	-3.825244423	0.000130642	0.000802363	Ms4a12
ENSMUSG0C 346.1988163	-1.437342004	0.375786653	-3.824888388	0.000130831	0.000803316	Atp7a
ENSMUSG0C 665.3709228	-0.803918808	0.210205204	-3.824447696	0.000131066	0.000804546	Ccdc32
ENSMUSG0C 7.043460184	-2.721611485	0.7117249	-3.823965529	0.000131322	0.000805914	Mir145a
ENSMUSG0C 38.43013895	-2.574552153	0.673330205	-3.82361007	0.000131512	0.000806869	Tgm3
ENSMUSG0C 744.2366467	-0.966575579	0.25284314	-3.822826982	0.00013193	0.000809018	Mlycd
ENSMUSG0C 9450.233132	-1.087406469	0.284465265	-3.822633554	0.000132034	0.000809236	Coro1c
ENSMUSG0C 195.5643982	-2.806656061	0.734424468	-3.821572107	0.000132604	0.000812308	NA
ENSMUSG0C 84.8603848	-1.214612277	0.317855847	-3.821267682	0.000132767	0.000813102	Fam171b
ENSMUSG0C 709.1479219	-0.758577443	0.198572303	-3.820157349	0.000133367	0.00081635	Gltscr1l
ENSMUSG0C 5.926929663	-3.55314602	0.93016981	-3.819889638	0.000133511	0.000817026	Serpina1c
ENSMUSG0C 9479.511735	-0.740129272	0.193816568	-3.818710035	0.000134151	0.00082052	Chp1
ENSMUSG0C 4.474802686	-3.08128315	0.806983378	-3.81827338	0.000134389	0.000821762	Slitrk1
ENSMUSG0C 916.624511	-0.614022717	0.160822952	-3.818004266	0.000134536	0.000822108	Mlit10
ENSMUSG0C 799.3444271	-0.850874511	0.222859925	-3.817978996	0.000134549	0.000822108	Arid4b
ENSMUSG0C 70.02437049	-1.614227236	0.42285759	-3.817425234	0.000134852	0.000823319	P2ry10
ENSMUSG0C 45.61618603	-2.382998815	0.624254062	-3.81735412	0.00013489	0.000823345	Ccl22
ENSMUSG0C 9.332859378	-2.121098829	0.555855165	-3.81591998	0.000135676	0.00082793	Arpp21
ENSMUSG0C 36.64417446	-1.606781346	0.42117139	-3.815029662	0.000136167	0.000830494	9530026P05Rik
ENSMUSG0C 225.6329433	-1.079970959	0.28310372	-3.814753685	0.000136319	0.000831209	Apbb1
ENSMUSG0C 108.5393997	-1.297553632	0.340215555	-3.813916245	0.000136782	0.000833604	NA
ENSMUSG0C 20.80150399	-1.755153617	0.46038589	-3.812353194	0.00013765	0.00083825	NA
ENSMUSG0C 3179.772304	-0.803273551	0.210744276	-3.811603169	0.000138068	0.000840367	Smg1
ENSMUSG0C 1199.416235	-1.015673935	0.266478199	-3.811471023	0.000138142	0.000840601	Col4a3bp
ENSMUSG0C 26.71221969	-1.840098543	0.483321034	-3.807197317	0.000140551	0.000854818	NA
ENSMUSG0C 2825.338061	-0.504005742	0.132395893	-3.806807974	0.000140772	0.000855726	Fam63a
ENSMUSG0C 893.3644431	-1.944840466	0.511334525	-3.803460103	0.000142689	0.000866271	Gjb3
ENSMUSG0C 135923.2711	-1.159778616	0.305132922	-3.800896366	0.000144174	0.000874614	CYTB
ENSMUSG0C 4158.614102	-1.153005937	0.303458777	-3.799547168	0.000144961	0.000878716	Hsd17b4
ENSMUSG0C 62.48032415	-1.456934162	0.383489822	-3.799146886	0.000145195	0.000879911	NA
ENSMUSG0C 6157.329341	-1.667745857	0.439080043	-3.798272965	0.000145708	0.000882794	Sord
ENSMUSG0C 51419.20558	-0.953715805	0.25109898	-3.798166779	0.00014577	0.000882947	Epcam
ENSMUSG0C 4793.788512	-1.972922527	0.5196472	-3.796657672	0.00014666	0.000887494	Mogat2
ENSMUSG0C 1193.60196	-1.492499873	0.393471963	-3.793154315	0.000148746	0.000899593	Cited2
ENSMUSG0C 23.99047115	-1.525124227	0.402082197	-3.793065792	0.000148799	0.000899685	Mroh2a
ENSMUSG0C 10506.39648	-0.948077334	0.249975769	-3.792676941	0.000149032	0.000900866	Tm9sf2
ENSMUSG0C 2297.145713	-1.662438803	0.43849801	-3.791211743	0.000149914	0.000905737	Galm
ENSMUSG0C 668.9790814	-1.052081296	0.277551155	-3.790585186	0.000150293	0.000907564	Spire2
ENSMUSG0C 153.2203147	-2.66241919	0.702504803	-3.789894643	0.000150711	0.000909166	Tldc2
ENSMUSG0C 2040.419782	-1.319800063	0.348284433	-3.789431676	0.000150992	0.000910631	Dmpk
ENSMUSG0C 1075.900487	-1.890362593	0.498879994	-3.789213068	0.000151125	0.000911201	BC025446
ENSMUSG0C 645.220393	-1.194052216	0.315138694	-3.788973679	0.000151271	0.000911848	Gas2l3
ENSMUSG0C 1077.572387	-1.268372709	0.334831756	-3.788089651	0.00015181	0.000914607	Bcas1
ENSMUSG0C 1706.294304	-1.365328802	0.360425322	-3.78810455	0.000151801	0.000914607	Foxo1
ENSMUSG0C 3.601179856	-3.919165209	1.034941732	-3.786846241	0.000152571	0.000918057	Mir194-1
ENSMUSG0C 72.10738769	-1.489240129	0.393321617	-3.786316498	0.000152897	0.000919782	Rims3
ENSMUSG0C 2066.663163	-0.831520181	0.219634904	-3.785920029	0.000153141	0.000920784	Taok3
ENSMUSG0C 61.94440316	-1.290951066	0.340993557	-3.785851783	0.000153183	0.000920803	NA
ENSMUSG0C 12622.47827	-2.059351667	0.543985071	-3.785676807	0.000153291	0.000921218	Ceacam1
ENSMUSG0C 188.5614775	-1.229463543	0.324849197	-3.784720896	0.000153881	0.000924053	Gpr55
ENSMUSG0C 28.7770201	-1.88152008	0.497143586	-3.784661276	0.000153918	0.000924053	NA
ENSMUSG0C 530.4236528	-1.976085503	0.522302528	-3.783411711	0.000154693	0.000928003	Xkr9
ENSMUSG0C 7.149167044	-2.616647466	0.691776468	-3.782504299	0.000155258	0.000931158	Raly1
ENSMUSG0C 5.805551922	-2.712770339	0.717271318	-3.782070006	0.00015553	0.00093255	Nrg3
ENSMUSG0C 18.60557526	-1.740234031	0.460142242	-3.781948003	0.000155606	0.000932771	NA
ENSMUSG0C 17186.1512	-1.077772487	0.285150085	-3.779667431	0.000157038	0.000940875	Flna
ENSMUSG0C 4343.007241	-0.773421178	0.204644741	-3.779335721	0.000157247	0.00094166	Rab11fip1
ENSMUSG0C 35.96875861	-1.855643894	0.491188093	-3.777868236	0.000158177	0.000946509	Olf1459
ENSMUSG0C 4378.230874	-1.149799285	0.304412671	-3.777107179	0.00015866	0.000948688	Tfg
ENSMUSG0C 464.0632402	-0.752348563	0.199192355	-3.776995173	0.000158732	0.000948876	Mynn
ENSMUSG0C 6.000785194	-3.139369819	0.831351686	-3.776223555	0.000159224	0.000951579	Flrt1
ENSMUSG0C 3789.411228	-1.224320475	0.324400557	-3.774101023	0.000160586	0.000958511	Ept1
ENSMUSG0C 730.623562	-1.813736964	0.480609943	-3.773823223	0.000160765	0.000959338	NA
ENSMUSG0C 487.3364965	-0.925666304	0.245455143	-3.771223916	0.000162449	0.000968415	Crlf3
ENSMUSG0C 5757.563712	-2.377112987	0.630424963	-3.770651749	0.000162822	0.000970151	Fmo5
ENSMUSG0C 43117.40084	-2.214863147	0.587818346	-3.767938111	0.000164601	0.000980264	Krt20



ENSMUSG0C 4189.129716	-1.09944497	0.291871368	-3.766881893	0.000165299	0.000983679	H2-T23
ENSMUSG0C 17.01655114	-2.135245822	0.5668865	-3.766619635	0.000165473	0.000984466	NA
ENSMUSG0C 12.91484236	-1.728885927	0.459040392	-3.766304574	0.000165682	0.000985462	Pcdhgb4
ENSMUSG0C 8.561606427	-2.227275177	0.591567155	-3.765041985	0.000166521	0.000990207	NA
ENSMUSG0C 3405.043133	-0.674100804	0.179086597	-3.764105266	0.000167146	0.000993428	Map2k1
ENSMUSG0C 3480.29759	-1.442003354	0.383138014	-3.763665576	0.000167441	0.000994783	Acaa1a
ENSMUSG0C 4691.146146	-1.004587555	0.266929696	-3.763491174	0.000167558	0.000995125	6820431F20Rik
ENSMUSG0C 665.6869507	-0.866124689	0.230165809	-3.763046702	0.000167856	0.000996647	Sowahc
ENSMUSG0C 612.6182127	-1.03041688	0.273852596	-3.762669752	0.000168109	0.000997901	Btbd6
ENSMUSG0C 39.49033914	-2.11989856	0.563649659	-3.761021633	0.000169221	0.001004249	Hal
ENSMUSG0C 12.36634553	-2.228657052	0.592601987	-3.760799156	0.000169371	0.001004892	4933433G15Rik
ENSMUSG0C 1306.046975	-0.715447323	0.190243207	-3.760698397	0.00016944	0.001005046	Plekhl1
ENSMUSG0C 462.1568133	-0.940872635	0.250230902	-3.76001776	0.000169901	0.001007281	Trp53i13
ENSMUSG0C 3630.416465	-0.567640195	0.150980946	-3.759680999	0.00017013	0.001008386	Usp9x
ENSMUSG0C 26.38098311	-1.760101624	0.468171267	-3.759525088	0.000170236	0.001008727	Slc35d3
ENSMUSG0C 2673.24905	-2.373981783	0.63160465	-3.758651529	0.000170832	0.001011786	Cyp2s1
ENSMUSG0C 2617.649368	-1.024187393	0.272645299	-3.756482865	0.000172318	0.001018896	Cpe
ENSMUSG0C 11.65538727	-2.083910721	0.554753523	-3.75646235	0.000172332	0.001018896	Myt1l
ENSMUSG0C 8139.944944	-0.58587497	0.155974417	-3.756224782	0.000172496	0.001019609	Fkbp8
ENSMUSG0C 1803.469453	-0.608780483	0.162254981	-3.751998719	0.00017543	0.001035924	Lrrc41
ENSMUSG0C 321.0106691	-0.796666418	0.212337608	-3.751885617	0.00017551	0.001036134	Ranbp6
ENSMUSG0C 16.17009402	-2.287015318	0.609578311	-3.751799035	0.00017557	0.001036235	NA
ENSMUSG0C 109.4385466	-1.608595518	0.428888776	-3.750612297	0.000176403	0.001040376	Cacnb2
ENSMUSG0C 11.86522891	-2.890481914	0.770730003	-3.750317105	0.000176611	0.001041343	NA
ENSMUSG0C 10335.8965	-1.565565109	0.417520637	-3.749671199	0.000177067	0.001043511	Slc6a6
ENSMUSG0C 1657.654365	-1.041967494	0.278027228	-3.747717451	0.000178451	0.00105141	Rab3gap2
ENSMUSG0C 6088.80547	-1.02764707	0.274289784	-3.746574355	0.000179266	0.001055425	Lima1
ENSMUSG0C 5.351071767	-2.793387084	0.745633249	-3.746328489	0.000179442	0.001055936	Sstr4
ENSMUSG0C 1675.45691	-1.184007636	0.31604394	-3.746338674	0.000179434	0.001055936	Dedd2
ENSMUSG0C 142.6420219	-2.011388385	0.537097273	-3.744923846	0.000180449	0.001060548	Cd4
ENSMUSG0C 23.85148624	-1.501917299	0.401192249	-3.743634884	0.000181377	0.001065479	St8sia1
ENSMUSG0C 1045.979335	-0.821151989	0.219394041	-3.7428181	0.000181968	0.001068685	Zfp710
ENSMUSG0C 382.3282395	-0.708371301	0.189308818	-3.741882218	0.000182647	0.001071879	Amacr
ENSMUSG0C 106.8449313	-0.990839015	0.264926998	-3.740045459	0.000183987	0.00107911	Vsig10l
ENSMUSG0C 20.3082359	-1.915832245	0.51225373	-3.740006432	0.000184016	0.00107911	9130019P16Rik
ENSMUSG0C 739.2277484	-2.685975717	0.718371341	-3.738979501	0.000184769	0.001082725	0610005C13Rik
ENSMUSG0C 1343.556098	-1.828779161	0.489188468	-3.73839385	0.0001852	0.001084982	Gcnt4
ENSMUSG0C 97.47700908	-1.314527877	0.351663113	-3.738031737	0.000185467	0.00108601	Sv2a
ENSMUSG0C 51.37122244	-1.521332367	0.407043498	-3.737517919	0.000185846	0.001087695	NA
ENSMUSG0C 135.3314301	-2.456155024	0.65718885	-3.737365637	0.000185958	0.001088017	Dcst1
ENSMUSG0C 4.843876283	-2.894784134	0.774561581	-3.737319543	0.000185992	0.001088017	Hs3st5
ENSMUSG0C 1196.730319	-1.059754733	0.283572506	-3.737156145	0.000186113	0.001088456	Crim1
ENSMUSG0C 2679.064697	-1.454547736	0.389420338	-3.735161199	0.000187595	0.001096581	Casp7
ENSMUSG0C 247.467559	-1.388421916	0.371743427	-3.73489298	0.000187795	0.001097481	Lrmp
ENSMUSG0C 269.8306369	-0.804466377	0.215397957	-3.734791127	0.000187871	0.001097655	Jrkl
ENSMUSG0C 912.6058482	-1.014713005	0.271781762	-3.73355812	0.000188794	0.001102232	Atxn7
ENSMUSG0C 3439.588035	-0.481625219	0.129011325	-3.733201095	0.000189062	0.001103254	Pkn1
ENSMUSG0C 1723.900459	-1.155550511	0.309574478	-3.732705996	0.000189434	0.001104882	Ank
ENSMUSG0C 878.0326934	-0.997189436	0.267171065	-3.732400575	0.000189664	0.001105952	Cpeb2
ENSMUSG0C 7.878249683	-2.333353977	0.625296962	-3.73159334	0.000190272	0.00110923	NA
ENSMUSG0C 15.74915265	-1.957392741	0.524602301	-3.731193584	0.000190575	0.001110447	Psd2
ENSMUSG0C 9752.513617	-1.850068718	0.496142726	-3.728904245	0.000192314	0.001119499	Lap3
ENSMUSG0C 1685.5405	-0.623602166	0.167253882	-3.728476489	0.000192641	0.001121111	Tbc1d9b
ENSMUSG0C 39.98572502	-3.107597154	0.833600563	-3.727921131	0.000193066	0.001123309	NA
ENSMUSG0C 9.044919925	-2.179304344	0.584647575	-3.727552182	0.000193349	0.001124403	NA
ENSMUSG0C 4275.985526	-1.250470066	0.3355232	-3.726925791	0.000193829	0.001126925	Dsc2
ENSMUSG0C 707.541784	-0.926027622	0.248517185	-3.726211621	0.000194379	0.001129568	Elmod2
ENSMUSG0C 5.662594066	-3.07183264	0.824422742	-3.726040637	0.000194511	0.001130057	Grm7
ENSMUSG0C 157.2492417	-1.243614134	0.333914332	-3.72435087	0.000195818	0.001136541	Gfod1
ENSMUSG0C 13.36546473	-1.700215523	0.456802004	-3.721996635	0.000197654	0.001145793	NA
ENSMUSG0C 1247.754072	-0.705622376	0.189600703	-3.721623195	0.000197946	0.001147209	Cfl2
ENSMUSG0C 257.5521885	-2.10102486	0.564600532	-3.721259086	0.000198232	0.001148585	Edn2
ENSMUSG0C 35.76504967	-1.64503904	0.4420752	-3.721174674	0.000198298	0.001148689	Rnf207
ENSMUSG0C 1553.82813	-0.935914386	0.251556976	-3.720486709	0.000198839	0.001151173	Nkiras2
ENSMUSG0C 3.486376072	-3.579156162	0.96202523	-3.720438978	0.000198877	0.001151173	Klhl1
ENSMUSG0C 2438.825349	-2.769033598	0.745028283	-3.716682524	0.000201856	0.001166453	NA
ENSMUSG0C 858.4503096	-1.510891723	0.406537449	-3.716488423	0.000202011	0.001167065	Tmem140



ENSMUSG0C 23.26955529	-2.244431371	0.604239325	-3.714474177	0.000203627	0.001176114	NA
ENSMUSG0C 1862.67859	-0.99083084	0.266841008	-3.713188045	0.000204665	0.001181535	Synj2bp
ENSMUSG0C 6735.419902	-1.570651985	0.423216467	-3.71122607	0.000206258	0.001189575	Zfp36
ENSMUSG0C 2453.681864	-0.665707821	0.179400793	-3.710729541	0.000206663	0.001191622	Lrp6
ENSMUSG0C 1136.950524	-0.712852567	0.192116988	-3.710512931	0.00020684	0.001192352	Ngly1
ENSMUSG0C 70.29796573	-1.314942827	0.354454502	-3.709764773	0.000207452	0.001195591	NA
ENSMUSG0C 2788.313827	-0.677170984	0.182560053	-3.709305365	0.000207829	0.001197182	Kdm2a
ENSMUSG0C 869.9984758	-2.967200545	0.799928759	-3.709331003	0.000207808	0.001197182	Mptx2
ENSMUSG0C 61.94588238	-1.678112524	0.452418837	-3.709201265	0.000207914	0.001197354	NA
ENSMUSG0C 907.3816061	-0.624283623	0.168450684	-3.706031995	0.000210532	0.001209354	Pex13
ENSMUSG0C 4.719507461	-2.870306889	0.774463211	-3.706188816	0.000210401	0.001209354	Dlx1
ENSMUSG0C 1183.213787	-0.84924488	0.229146456	-3.706122689	0.000210456	0.001209354	Gm15800
ENSMUSG0C 399.2824059	-1.216599771	0.328277809	-3.706006732	0.000210553	0.001209354	Nkx2-3
ENSMUSG0C 2600.289832	-0.810709449	0.218777826	-3.705628975	0.000210867	0.001210866	Gpr107
ENSMUSG0C 6.405400805	-3.135524443	0.846349285	-3.704764093	0.000211588	0.001214418	NA
ENSMUSG0C 58.50059221	-1.659813265	0.448123402	-3.703920075	0.000212293	0.001218173	Chst8
ENSMUSG0C 2064.543333	-1.223931083	0.330583843	-3.702331828	0.000213627	0.001225235	Dera
ENSMUSG0C 21.93323488	-2.080112036	0.56187083	-3.702117861	0.000213807	0.001225973	NA
ENSMUSG0C 693.063614	-1.25395887	0.338748179	-3.701743498	0.000214123	0.001227487	Nqo2
ENSMUSG0C 67.36442762	-1.178381495	0.318522903	-3.699518887	0.000216009	0.00123591	Dynlt1a
ENSMUSG0C 1283.640108	-1.083482561	0.292922401	-3.698872323	0.000216559	0.001238168	Mcur1
ENSMUSG0C 6031.945869	-2.439098588	0.659449875	-3.698686861	0.000216718	0.001238775	Gm1123
ENSMUSG0C 80979.72787	-1.638760986	0.44316957	-3.697819291	0.00021746	0.001242716	Lgals4
ENSMUSG0C 179.0230585	-1.670883153	0.451967969	-3.696906126	0.000218243	0.001245994	Il18r1
ENSMUSG0C 63.64838598	-1.205090827	0.326021484	-3.696354037	0.000218718	0.001248405	Wnt9a
ENSMUSG0C 80.14718666	-2.38257411	0.644647035	-3.695935886	0.000219078	0.001250162	Rhbg
ENSMUSG0C 4001.775746	-3.543804304	0.958867576	-3.695822441	0.000219176	0.00125042	Slc13a1
ENSMUSG0C 2083.814404	-0.958769809	0.259429789	-3.695681263	0.000219298	0.001250814	Uaca
ENSMUSG0C 10421.0114	-1.769676688	0.478987106	-3.694622813	0.000220213	0.001254396	Ano6
ENSMUSG0C 8558.116334	-1.673210735	0.453002104	-3.693604777	0.000221097	0.00125866	Tagln
ENSMUSG0C 3041.505132	-1.325143993	0.358865906	-3.69258815	0.000221983	0.001263401	Casp8
ENSMUSG0C 291.1263523	-2.095782498	0.567629318	-3.692167462	0.000222351	0.001264887	Atoh1
ENSMUSG0C 2624.878345	-1.144216271	0.310091148	-3.689935288	0.000224311	0.001275122	Inpp5a
ENSMUSG0C 25.30509784	-1.328438126	0.360051337	-3.689579763	0.000224625	0.001276294	NA
ENSMUSG0C 19.14924801	-2.702585675	0.732738752	-3.688334578	0.000225727	0.001282249	NA
ENSMUSG0C 453.5932319	-1.02117687	0.276911589	-3.687736125	0.000226258	0.001284653	Zfp518a
ENSMUSG0C 11.81177575	-1.947494373	0.528294779	-3.686378232	0.000227468	0.001290907	Frmppd4
ENSMUSG0C 5278.774124	-1.054868857	0.28621731	-3.685552266	0.000228207	0.001293864	March6
ENSMUSG0C 913.2931601	-1.300379445	0.352826592	-3.685604984	0.00022816	0.001293864	Akap7
ENSMUSG0C 19.841572	-1.424418889	0.386474691	-3.685671845	0.0002281	0.001293864	9230114K14Rik
ENSMUSG0C 2068.318324	-0.778395213	0.211222395	-3.685192625	0.00022853	0.001295384	Eml4
ENSMUSG0C 17.15057317	-1.623218353	0.440519756	-3.684779927	0.0002289	0.001297175	Cntnap5a
ENSMUSG0C 1512.758105	-1.786775484	0.485016106	-3.683950828	0.000229647	0.001300783	Car13
ENSMUSG0C 545.2573795	-1.425444596	0.387059164	-3.682756358	0.000230726	0.001305961	Gem
ENSMUSG0C 4.207378149	-3.925042438	1.065913017	-3.682329023	0.000231113	0.00130753	Gm28729
ENSMUSG0C 77.06837897	-2.776293357	0.754419597	-3.680038758	0.000233199	0.00131776	NA
ENSMUSG0C 90.55445713	-1.726177019	0.469268225	-3.678444282	0.000234661	0.001325394	Tmem151a
ENSMUSG0C 8056.204159	-0.849605646	0.231133406	-3.675823673	0.000237083	0.001338757	Ctnn
ENSMUSG0C 4394.20221	-0.916912682	0.249496706	-3.675049252	0.000237804	0.001342505	Tjp3
ENSMUSG0C 28.5612552	-2.196561144	0.597800284	-3.674406323	0.000238403	0.00134525	AF529169
ENSMUSG0C 238.0547306	-1.005580669	0.27373278	-3.673585122	0.000239171	0.001348942	E430018J23Rik
ENSMUSG0C 2030.742012	-0.9718205	0.26456833	-3.673230662	0.000239503	0.001350495	Uap1
ENSMUSG0C 16.6006281	-2.113932929	0.575517474	-3.673099472	0.000239626	0.001350868	NA
ENSMUSG0C 978.6588303	-1.20396325	0.327828534	-3.672539533	0.000240152	0.001353511	Arrdc3
ENSMUSG0C 6014.685179	-0.568948088	0.155050186	-3.66944473	0.000243078	0.001368703	Hnnpul2
ENSMUSG0C 288.0815033	-1.096008288	0.298760048	-3.66852361	0.000243955	0.001373317	Zfp747
ENSMUSG0C 533.4594648	-0.787845169	0.214824916	-3.667382645	0.000245046	0.001379131	Gpatch2
ENSMUSG0C 545.995526	-0.94909267	0.25883852	-3.666736576	0.000245666	0.001381964	Vps33b
ENSMUSG0C 1991.185224	-1.016051851	0.277251047	-3.664735842	0.000247594	0.001391493	Foxj3
ENSMUSG0C 12.82849572	-1.726270754	0.471061466	-3.664640135	0.000247687	0.001391685	Kcnc2
ENSMUSG0C 1056.82637	-1.056063466	0.288219349	-3.664096349	0.000248213	0.001394315	Rbl2
ENSMUSG0C 3604.704793	-2.280700127	0.622537812	-3.663552773	0.000248741	0.001396551	Tm6sf2
ENSMUSG0C 250.6900985	-1.289439283	0.351968807	-3.663504433	0.000248788	0.001396551	Abhd18
ENSMUSG0C 415.4992091	-0.586690932	0.160219472	-3.661795451	0.000250454	0.001404244	Pdcd7
ENSMUSG0C 1455.239456	-0.867005909	0.236804077	-3.661279486	0.000250959	0.001406743	Agap1
ENSMUSG0C 17.84671019	-2.008235738	0.549106575	-3.657278622	0.000254907	0.001427865	NA
ENSMUSG0C 1575.93772	-0.686561161	0.187754204	-3.65670194	0.000255481	0.001430743	Mbd6

ENSMUSG0C 642.6539819	-1.070916468	0.293019006	-3.654767932	0.000257415	0.001440213	Ifnlr1
ENSMUSG0C 34.09405548	-1.640636225	0.449124381	-3.652966297	0.000259228	0.001449336	NA
ENSMUSG0C 373.3482987	-1.190242738	0.325882957	-3.652362641	0.000259839	0.001452406	Ccser1
ENSMUSG0C 1373.069263	-0.955889485	0.261730962	-3.652183447	0.00026002	0.001453078	Trim16
ENSMUSG0C 11.25374602	-1.9218194	0.526254834	-3.651879801	0.000260328	0.001454456	Rasl2-9
ENSMUSG0C 17.30029422	-2.4391098	0.667923639	-3.65177942	0.00026043	0.001454682	Grm8
ENSMUSG0C 1288.042667	-2.66692716	0.731011902	-3.64826777	0.000264014	0.001473667	Lrrc19
ENSMUSG0C 9265.993974	-0.667977315	0.183122218	-3.647713103	0.000264585	0.001475464	Wdr1
ENSMUSG0C 32.07795823	-1.904742762	0.522401604	-3.646127321	0.000266222	0.001483898	Grap2
ENSMUSG0C 443.1305804	-0.628282147	0.172415077	-3.64400932	0.000268424	0.001494416	Mtfmt
ENSMUSG0C 1835.182423	-1.135854228	0.311841329	-3.642410817	0.000270097	0.001503025	Mical2
ENSMUSG0C 1615.294885	-1.737280088	0.477089421	-3.641413983	0.000271145	0.001507445	Prkaa2
ENSMUSG0C 731.6591687	-0.642328675	0.176394049	-3.641441866	0.000271115	0.001507445	Csnk1g1
ENSMUSG0C 2783.187288	-1.386294525	0.380726323	-3.641183811	0.000271387	0.001507878	Frk
ENSMUSG0C 14.33968125	-1.907592721	0.523897066	-3.641159389	0.000271413	0.001507878	Pld5
ENSMUSG0C 15.71489818	-1.855440848	0.509594391	-3.64101505	0.000271565	0.001508371	NA
ENSMUSG0C 1323.559964	-1.14024077	0.313288264	-3.6395898	0.000273073	0.001516035	2010300C02Rik
ENSMUSG0C 7.617891271	-2.247538483	0.617676991	-3.638695495	0.000274023	0.001520598	Grid2
ENSMUSG0C 51206.43978	-1.202174704	0.330447481	-3.638020477	0.000274742	0.001524196	ND4
ENSMUSG0C 7.42866664	-2.597089291	0.713911852	-3.637829074	0.000274946	0.001524653	Alk
ENSMUSG0C 78.1271892	-1.526027077	0.419601693	-3.636846804	0.000275996	0.001529518	Clca3a2
ENSMUSG0C 2004.88425	-0.783347526	0.215393075	-3.636827816	0.000276016	0.001529518	Tmem9b
ENSMUSG0C 650.3312146	-1.150389667	0.316394265	-3.63593717	0.000276972	0.001534455	Phactr2
ENSMUSG0C 70.97570015	-2.111076056	0.580767312	-3.634977405	0.000278005	0.001539461	Lrrn1
ENSMUSG0C 3690.533918	-0.984501101	0.270858548	-3.634742587	0.000278258	0.001540146	Tns4
ENSMUSG0C 1526.194337	-2.202999335	0.606108233	-3.634663277	0.000278344	0.001540261	Pla2g12b
ENSMUSG0C 1075.449897	-1.338161781	0.368223412	-3.63410293	0.000278949	0.001543252	Mfhas1
ENSMUSG0C 5549.473489	-0.819712717	0.225601753	-3.633450124	0.000279657	0.001546803	Chmp1a
ENSMUSG0C 657.2698031	-0.913276677	0.251388724	-3.632926182	0.000280225	0.001549287	Lnx1
ENSMUSG0C 22.33758487	-1.754691985	0.483012161	-3.632811193	0.00028035	0.001549558	Mapkapk5
ENSMUSG0C 3176.606653	-1.224149433	0.337153583	-3.630836192	0.000282504	0.001560739	Fam83h
ENSMUSG0C 1050.491336	-0.84826524	0.233632883	-3.630761351	0.000282586	0.001560828	Rreb1
ENSMUSG0C 1179.792042	-0.871755697	0.240135122	-3.630271537	0.000283123	0.001563066	Prpf4b
ENSMUSG0C 6.327221343	-2.610236675	0.719065144	-3.630042005	0.000283375	0.001564094	Elmod1
ENSMUSG0C 2350.26591	-1.0071169	0.277449112	-3.629915743	0.000283514	0.001564495	Lrba
ENSMUSG0C 1208.674621	-0.925893375	0.255114633	-3.629322877	0.000284166	0.001567728	Sertad2
ENSMUSG0C 226.3120226	-1.99276576	0.549221262	-3.628347805	0.000285241	0.00157293	Dnase1l3
ENSMUSG0C 843.8619396	-0.820904902	0.226268379	-3.628014237	0.00028561	0.001574597	Decr2
ENSMUSG0C 29.61748606	-1.372330506	0.378295763	-3.627665552	0.000285995	0.001575993	Mfsd4b5
ENSMUSG0C 25.99858325	-1.352139313	0.372747461	-3.627494364	0.000286185	0.001576672	Fam57b
ENSMUSG0C 9.09062531	-2.356113668	0.649870471	-3.625512736	0.000288389	0.001587708	Olfir845
ENSMUSG0C 11.30314284	-1.822091171	0.502955666	-3.62276696	0.000291468	0.001604292	Actl6b
ENSMUSG0C 1615.754535	-1.586626699	0.438040918	-3.62209701	0.000292224	0.001607831	Msra
ENSMUSG0C 1608.061583	-0.716964433	0.197942885	-3.622077317	0.000292247	0.001607831	Tmem19
ENSMUSG0C 1586.220295	-0.871090164	0.240619692	-3.620194821	0.000294381	0.001618075	Ptgr2
ENSMUSG0C 4044.902518	-2.378598501	0.657145285	-3.619593044	0.000295067	0.001621468	Slc26a6
ENSMUSG0C 1280.910711	-0.791019654	0.21856145	-3.619209402	0.000295504	0.001623029	Socs4
ENSMUSG0C 1261.057553	-2.164876924	0.598608523	-3.616515372	0.000298596	0.001638586	Adgrd1
ENSMUSG0C 187.3714333	-1.162639944	0.321515244	-3.616126964	0.000299044	0.001640666	Zfp784
ENSMUSG0C 68.25369443	-2.023862554	0.559961211	-3.614290619	0.000301171	0.001650812	Lamc3
ENSMUSG0C 6272.161196	-1.532465915	0.42408978	-3.61354125	0.000302043	0.001655211	Plscr1
ENSMUSG0C 7929.926409	-1.769076377	0.489678365	-3.612731341	0.000302989	0.001660008	Mapk6
ENSMUSG0C 25.12356109	-2.667322263	0.738396359	-3.612317736	0.000303472	0.001661893	NA
ENSMUSG0C 1931.511983	-0.881468614	0.244072911	-3.611497118	0.000304434	0.001666777	Edem3
ENSMUSG0C 69.57707233	-1.78785203	0.495197297	-3.61038326	0.000305745	0.001673566	NA
ENSMUSG0C 18.49713659	-1.833965555	0.508344438	-3.607722277	0.000308897	0.001689262	Sla2
ENSMUSG0C 2737.401853	-1.474997733	0.408882056	-3.607391697	0.000309291	0.001691026	Tmcc3
ENSMUSG0C 5268.26773	-0.975779676	0.270551225	-3.606635588	0.000310193	0.001694788	Ifngr2
ENSMUSG0C 460.8725918	-1.616714567	0.448392696	-3.605577394	0.00031146	0.001700537	Rhbdl2
ENSMUSG0C 16.42135757	-2.278857967	0.632240403	-3.60441686	0.000312855	0.001707368	Apol7e
ENSMUSG0C 31.59404718	-2.908874331	0.807676036	-3.601536012	0.000316343	0.001725611	NA
ENSMUSG0C 18987.90526	-0.593595981	0.164824582	-3.601380169	0.000316532	0.001726249	Itm2b
ENSMUSG0C 4.686877322	-2.81004588	0.780578422	-3.599953319	0.000318274	0.001735351	NA
ENSMUSG0C 2788.247443	-1.771424065	0.492312678	-3.598168691	0.000320466	0.001746097	Ppp1r14d
ENSMUSG0C 7.313022813	-3.156251198	0.87726548	-3.597829015	0.000320884	0.00174786	NA
ENSMUSG0C 5153.476896	-1.297395291	0.360623403	-3.597645854	0.00032111	0.001748407	Midn
ENSMUSG0C 79.58651213	-2.358789955	0.655672142	-3.597514374	0.000321273	0.00174889	Ikzf3

ENSMUSG0C 325.6230699	-2.630103662	0.731323392	-3.596362008	0.000322699	0.001756249	Proz
ENSMUSG0C 158.4816972	-1.205202045	0.335218914	-3.595268624	0.000324057	0.001763238	Figl12
ENSMUSG0C 1412.526321	-1.349794691	0.37556318	-3.594054908	0.000325571	0.001770666	El12
ENSMUSG0C 1481.330744	-1.520090478	0.423295234	-3.591088101	0.0003293	0.001789309	Acad11
ENSMUSG0C 4705.508901	-2.11354134	0.588697423	-3.590199747	0.000330425	0.001795008	Cideb
ENSMUSG0C 248.2963361	-1.361408333	0.379236615	-3.589865216	0.000330849	0.001796902	Rab6b
ENSMUSG0C 685.8398568	-1.561000552	0.434908308	-3.589263582	0.000331613	0.001799408	Slc5a9
ENSMUSG0C 1339.259198	-0.870485687	0.242561356	-3.588723706	0.000332301	0.001802314	Pcf11
ENSMUSG0C 451.3011437	-2.475323382	0.689811611	-3.588404927	0.000332707	0.001803696	Gm11127
ENSMUSG0C 7631.206237	-1.131008794	0.315256887	-3.587578386	0.000333763	0.001808183	Gsn
ENSMUSG0C 694.483408	-0.696356319	0.194207449	-3.585631355	0.000336264	0.001820898	Rdh14
ENSMUSG0C 93.34654737	-1.163556311	0.324542368	-3.58522161	0.000336792	0.001823344	NA
ENSMUSG0C 215.7401486	-1.260183422	0.351563725	-3.584509247	0.000337713	0.001827078	Dtna
ENSMUSG0C 4293.458901	-1.150034828	0.320972985	-3.582964552	0.000339717	0.001836666	Pdcd6
ENSMUSG0C 318.2176747	-0.696566003	0.194417575	-3.582834543	0.000339886	0.001837163	Tmem62
ENSMUSG0C 3.285847859	-3.455772566	0.964692152	-3.582254253	0.000340642	0.001840412	NA
ENSMUSG0C 116.1460671	-2.065546136	0.57678756	-3.581121162	0.000342123	0.001847993	Fbxl22
ENSMUSG0C 11.99612366	-2.07730018	0.580214608	-3.5802273	0.000343295	0.001853905	Cdh6
ENSMUSG0C 867.1183771	-1.596159857	0.445854469	-3.580001923	0.000343592	0.001854661	Abcc9
ENSMUSG0C 12.61382526	-1.836698955	0.51326658	-3.578450319	0.000345638	0.001863587	Cacnb4
ENSMUSG0C 640.7170646	-1.472428568	0.411673872	-3.576686959	0.000347976	0.001873354	Cdc42ep2
ENSMUSG0C 7385.322018	-2.328261515	0.651037428	-3.576232968	0.000348581	0.001875627	Cyp4v3
ENSMUSG0C 405.5160638	-1.326554799	0.371043438	-3.575200808	0.000349959	0.001882616	2810408A11Rik
ENSMUSG0C 177.4735714	-1.582673416	0.442904281	-3.573398325	0.000352378	0.001895199	Golt1a
ENSMUSG0C 2473.150652	-0.759232005	0.212483279	-3.57313765	0.000352729	0.001896658	Ppp1r12c
ENSMUSG0C 737.9505679	-0.811940281	0.227250461	-3.572887273	0.000353067	0.001898044	Isoc2a
ENSMUSG0C 1453.925151	-1.142665271	0.319926311	-3.571651448	0.000354737	0.001906593	Plekhf2
ENSMUSG0C 12.82955162	-2.161783152	0.605304636	-3.571396985	0.000355082	0.001908015	Lhfp15
ENSMUSG0C 4443.985331	-0.988811592	0.276935181	-3.570552463	0.000356229	0.001913312	Trak1
ENSMUSG0C 9.880571637	-2.132526139	0.597246694	-3.570595132	0.000356171	0.001913312	NA
ENSMUSG0C 8.050197991	-2.329957456	0.652568618	-3.570440553	0.000356381	0.001913697	NA
ENSMUSG0C 132.4550162	-1.300916581	0.364364666	-3.570369753	0.000356478	0.001913782	Setbp1
ENSMUSG0C 322.544927	-0.86950042	0.243607498	-3.56926789	0.00035798	0.00192098	Hspb6
ENSMUSG0C 1791.19345	-0.638960138	0.179049674	-3.56861938	0.000358867	0.001924871	Nipbl
ENSMUSG0C 1745.250786	-1.838512214	0.515483076	-3.566581134	0.000361669	0.001938584	Mlxipl
ENSMUSG0C 1533.138111	-1.262589175	0.354076541	-3.565865079	0.000362658	0.001943009	Elmsan1
ENSMUSG0C 11.86212525	-1.841996899	0.5166561	-3.565228205	0.00036354	0.001947294	NA
ENSMUSG0C 2889.201757	-1.108130315	0.310875325	-3.564548954	0.000364482	0.001951904	Sdcbp2
ENSMUSG0C 64.7903478	-1.56060467	0.438000058	-3.563023886	0.000366607	0.001961514	Txk
ENSMUSG0C 15.56536038	-1.966042654	0.551846572	-3.562661713	0.000367114	0.001963781	Nmur1
ENSMUSG0C 875.0219222	-2.408731526	0.676202672	-3.562144349	0.000367838	0.001967213	Erich4
ENSMUSG0C 1201.183594	-0.783175443	0.219878271	-3.561859205	0.000368238	0.001968465	Usp32
ENSMUSG0C 2211.25454	-0.84974665	0.238659379	-3.560499711	0.00037015	0.00197824	Mon2
ENSMUSG0C 109650.9086	-2.695095541	0.756986494	-3.560295413	0.000370438	0.001978889	Fabp2
ENSMUSG0C 38.74201169	-1.159728375	0.325813894	-3.559481035	0.000371588	0.001984379	Dzank1
ENSMUSG0C 30.24083497	-1.407222279	0.395354805	-3.559390863	0.000371716	0.001984379	Gm9530
ENSMUSG0C 5.238648095	-2.509591305	0.705350219	-3.557936524	0.00037378	0.001994465	Six3os1
ENSMUSG0C 7161.056436	-0.764628482	0.214948641	-3.557261306	0.000374741	0.001997387	Sptan1
ENSMUSG0C 716.4940431	-2.497671749	0.702389269	-3.555965133	0.000376594	0.002006362	Nags
ENSMUSG0C 48.96156386	-2.072798464	0.582904122	-3.555985259	0.000376565	0.002006362	NA
ENSMUSG0C 1640.213423	-0.703266817	0.197837293	-3.554773758	0.000378304	0.002013668	Rnf115
ENSMUSG0C 11033.68047	-1.474158881	0.414872319	-3.553283297	0.000380455	0.002024659	H2-Ab1
ENSMUSG0C 1313.841409	-0.907765997	0.25553202	-3.552454978	0.000381654	0.002030589	Fnbp1
ENSMUSG0C 33.36559448	-1.135417242	0.319686597	-3.551657318	0.000382813	0.002035842	C1qtnf9
ENSMUSG0C 365.3617026	-0.677542298	0.190775123	-3.551523315	0.000383008	0.002036423	Lrrc49
ENSMUSG0C 4.146959363	-2.967025403	0.835526672	-3.551084009	0.000383648	0.002038913	NA
ENSMUSG0C 3942.855956	-1.463757243	0.412281096	-3.55038651	0.000384666	0.002042952	Slc30a4
ENSMUSG0C 596.1506061	-1.11031225	0.312767784	-3.549957206	0.000385294	0.002045829	Card14
ENSMUSG0C 2608.834105	-0.645916862	0.181959531	-3.549783068	0.000385549	0.002046268	Abl1
ENSMUSG0C 37.13864118	-1.258881441	0.354835267	-3.547791211	0.000388476	0.002060884	Srcin1
ENSMUSG0C 210.9032048	-2.267601801	0.639242279	-3.547327637	0.00038916	0.002063592	Hoxb8
ENSMUSG0C 384.6944539	-0.626426654	0.176599499	-3.54715986	0.000389408	0.002064446	Ap5m1
ENSMUSG0C 550.9013236	-0.712143982	0.200785085	-3.546797221	0.000389945	0.002066828	Fam149b
ENSMUSG0C 188.9335491	-1.768061411	0.498565009	-3.546300641	0.00039068	0.002070265	Lipo3
ENSMUSG0C 6869.745464	-1.017964519	0.287074084	-3.545999363	0.000391127	0.002072171	Atp8b1
ENSMUSG0C 508.7106007	-1.027221058	0.289707071	-3.545723107	0.000391537	0.002073882	Tnnt2
ENSMUSG0C 48.33191238	-1.342849767	0.378780804	-3.545189601	0.000392331	0.002077621	Ikzf2

ENSMUSG0C 8.071854143	-2.706849513	0.763578963	-3.544950349	0.000392687	0.002079045	NA
ENSMUSG0C 1974.919854	-1.369382547	0.386456775	-3.543430044	0.000394958	0.002090525	Acss1
ENSMUSG0C 16.8990521	-1.427094571	0.402759211	-3.543294687	0.000395161	0.002090744	Khdrbs2
ENSMUSG0C 696.5429922	-1.108051115	0.3127307	-3.543147875	0.000395381	0.002091443	Akr1e1
ENSMUSG0C 3868.324582	-0.513504689	0.144937853	-3.542930141	0.000395708	0.002092704	Cnot1
ENSMUSG0C 23.00051622	-1.397347433	0.394417211	-3.542815564	0.000395879	0.002093148	NA
ENSMUSG0C 26.73378459	-1.490226639	0.420702297	-3.542235568	0.000396751	0.002096822	Ppp1r14c
ENSMUSG0C 42.05663457	-1.349442687	0.380981985	-3.542011804	0.000397088	0.002097202	NA
ENSMUSG0C 1226.333075	-1.08823836	0.307436295	-3.539719865	0.000400552	0.002114089	Fez2
ENSMUSG0C 858.5173186	-1.005926115	0.284304736	-3.538196823	0.00040287	0.002124905	Ppcs
ENSMUSG0C 8.962915114	-1.859192574	0.525768085	-3.536145743	0.000406011	0.002139572	NA
ENSMUSG0C 7052.551035	-0.733090114	0.207447975	-3.533850429	0.000409553	0.002157281	Fam120a
ENSMUSG0C 1880.594013	-0.692478855	0.195964885	-3.533688469	0.000409804	0.002158124	Cyb5r4
ENSMUSG0C 2044.730203	-0.903398686	0.255703035	-3.53299947	0.000410873	0.002163277	Rnf167
ENSMUSG0C 4127.663837	-0.74815711	0.211828634	-3.531897907	0.000412589	0.002171827	Irf6
ENSMUSG0C 30337.66041	-2.398575019	0.679152267	-3.531719077	0.000412868	0.002172815	Slc5a1
ENSMUSG0C 1389.066471	-0.602395626	0.170573554	-3.53158864	0.000413071	0.002173405	Dot1l
ENSMUSG0C 625.1265154	-0.650353349	0.184206573	-3.530565386	0.000414673	0.002181346	Wdr41
ENSMUSG0C 64.11015334	-2.688642377	0.761573208	-3.530379418	0.000414964	0.002181914	NA
ENSMUSG0C 16.49619081	-1.891448428	0.535862084	-3.529729911	0.000415984	0.002186309	NA
ENSMUSG0C 7.753502925	-2.343413799	0.664164464	-3.528363718	0.000418137	0.002194712	Hmx2
ENSMUSG0C 64.96101719	-1.346767841	0.38177165	-3.52767902	0.00041922	0.00219991	Il17rb
ENSMUSG0C 543.7145709	-1.47633329	0.418803275	-3.525123553	0.000423285	0.002218792	Ano7
ENSMUSG0C 1827.695136	-0.554093044	0.15719354	-3.524909752	0.000423627	0.002220094	Nfatc3
ENSMUSG0C 1239.390477	-2.24353598	0.636549131	-3.524529167	0.000424236	0.002222612	Slc17a4
ENSMUSG0C 13.65019398	-1.541317256	0.437323322	-3.524434162	0.000424388	0.002222612	Opcml
ENSMUSG0C 46499.00635	-1.225343115	0.347788391	-3.523243287	0.0004263	0.002231639	Krt19
ENSMUSG0C 51.77519103	-2.407248808	0.683426125	-3.522324826	0.00042778	0.002238893	NA
ENSMUSG0C 2349.426005	-1.104011992	0.313546819	-3.521043506	0.000429852	0.002248748	Raph1
ENSMUSG0C 1056.629262	-1.051166272	0.298615255	-3.52013588	0.000431326	0.002255464	Cdk13
ENSMUSG0C 3622.550638	-0.812947537	0.230970907	-3.519696695	0.000432041	0.002258705	Cmtm6
ENSMUSG0C 400.7605214	-0.954714001	0.271350952	-3.518373502	0.000434201	0.002268501	Sult1a1
ENSMUSG0C 1275.350987	-0.93829504	0.266838404	-3.516341825	0.000437537	0.002283923	Hagh
ENSMUSG0C 52.65772329	-1.555529159	0.44243638	-3.515825617	0.000438389	0.002287866	Tmem178
ENSMUSG0C 12.98094174	-2.293639645	0.652502291	-3.515144204	0.000439515	0.002292737	BC035044
ENSMUSG0C 5385.753402	-2.507543713	0.713425767	-3.51479275	0.000440097	0.002295269	NA
ENSMUSG0C 855.4821018	-0.712633523	0.2028102	-3.51379527	0.000441753	0.002302894	Itsn2
ENSMUSG0C 3.52775416	-3.134674421	0.892197922	-3.513429414	0.000442362	0.002305562	Cyp2f2
ENSMUSG0C 2353.484079	-0.583256781	0.166150231	-3.510418108	0.000447403	0.0023303	Ano10
ENSMUSG0C 1460.223655	-1.454912283	0.414604718	-3.509155152	0.000449533	0.00234088	Ank3
ENSMUSG0C 926.6649406	-1.234737085	0.352042942	-3.507347937	0.000452597	0.002355289	Rapgef2
ENSMUSG0C 3.586525074	-3.131048381	0.893062837	-3.505966491	0.000454952	0.002365474	Sat1l
ENSMUSG0C 4892.763092	-1.15863422	0.330526182	-3.505423417	0.000455882	0.002369786	Gna13
ENSMUSG0C 1671.764255	-0.814787887	0.232449086	-3.505231615	0.00045621	0.002370976	Sbf2
ENSMUSG0C 18.24254641	-1.412292265	0.402920191	-3.505141455	0.000456365	0.00237126	Tagln3
ENSMUSG0C 77.81867163	-1.471290619	0.419780917	-3.504901148	0.000456777	0.002372882	Chrn4
ENSMUSG0C 32.23265941	-1.592476146	0.454393982	-3.504615396	0.000457267	0.002374911	Gm20467
ENSMUSG0C 2839.070709	-0.564275721	0.161042009	-3.503903884	0.000458491	0.002380225	Vcl
ENSMUSG0C 10.91025226	-1.611397883	0.460026622	-3.502836149	0.000460333	0.00238822	Edaradd
ENSMUSG0C 1626.942231	-0.611812496	0.174689478	-3.50228591	0.000461284	0.002392113	Mapkap1
ENSMUSG0C 104.4025402	-0.712252108	0.203378557	-3.502100319	0.000461606	0.002393258	Zfp738
ENSMUSG0C 30.80436081	-1.820476961	0.51987028	-3.501790795	0.000462142	0.002395517	NA
ENSMUSG0C 984.13439	-0.84671781	0.241873889	-3.500658186	0.000464111	0.002403622	Arhgap42
ENSMUSG0C 251.0471717	-1.014640305	0.289895097	-3.500025752	0.000465213	0.002407757	Cyb561a3
ENSMUSG0C 19.98321199	-2.74400058	0.784012323	-3.499945728	0.000465353	0.002407955	NA
ENSMUSG0C 9914.066538	-1.053106564	0.300975667	-3.498975765	0.000467049	0.002416206	Tax1bp1
ENSMUSG0C 414.4800375	-0.984879613	0.281661703	-3.49667563	0.000471094	0.002435012	Creb12
ENSMUSG0C 332.5294941	-1.261236299	0.360758593	-3.496067243	0.00047217	0.00244004	9430038I01Rik
ENSMUSG0C 4164.468841	-1.094826957	0.313208834	-3.495517485	0.000473143	0.00244454	Erb2
ENSMUSG0C 158.8265769	-1.47422194	0.421971772	-3.49365061	0.000476464	0.002460627	Fosb
ENSMUSG0C 14.34795358	-2.078399395	0.594965593	-3.493310231	0.000477072	0.002462695	Fasl
ENSMUSG0C 18.51746908	-1.935188131	0.554036247	-3.492890837	0.000477822	0.002465494	NA
ENSMUSG0C 155.7596007	-2.033537456	0.582256203	-3.492513168	0.000478498	0.002468447	NA
ENSMUSG0C 252.1645764	-0.923259742	0.264391513	-3.492017316	0.000479387	0.002472497	Atad2b
ENSMUSG0C 215.7492841	-1.650956273	0.473076809	-3.489827112	0.000483333	0.002491767	Sh3rf2
ENSMUSG0C 4.265856899	-2.957314146	0.847586641	-3.489099526	0.000484651	0.002498017	NA
ENSMUSG0C 2.22611619	-3.533096908	1.012631696	-3.489024608	0.000484787	0.002498175	NA



ENSMUSG0C 164.9095883	-0.700727742	0.20088583	-3.488189002	0.000486304	0.002504366	Rmi1
ENSMUSG0C 4553.288432	-0.982441017	0.281669688	-3.487918855	0.000486796	0.002506355	Lta4h
ENSMUSG0C 3709.411334	-0.940155296	0.269558068	-3.487765373	0.000487075	0.00250725	Sucla2
ENSMUSG0C 1336.658524	-2.41818312	0.69368052	-3.486018493	0.000490267	0.002523134	Slc30a10
ENSMUSG0C 1792.037797	-0.784442216	0.225138491	-3.48426523	0.00049349	0.00253752	Pi4ka
ENSMUSG0C 2236.360758	-1.134410267	0.325592377	-3.484142592	0.000493716	0.002538136	Paqr4
ENSMUSG0C 10565.49827	-2.552166503	0.732870334	-3.482425726	0.000496893	0.002552258	Ces2a
ENSMUSG0C 16.89173303	-1.592361687	0.457456167	-3.480905501	0.000499722	0.002565123	Olfr1217
ENSMUSG0C 2920.527163	-1.104793119	0.317429318	-3.480438178	0.000500594	0.002569047	Prkar2a
ENSMUSG0C 58.64924909	-1.329794954	0.382150825	-3.479764707	0.000501854	0.002574401	NA
ENSMUSG0C 11.33680087	-2.154296553	0.619345859	-3.478341742	0.000504526	0.00258699	NA
ENSMUSG0C 65.97563321	-1.204690025	0.346431151	-3.477429845	0.000506246	0.002594126	Ccdc162
ENSMUSG0C 614.8891703	-1.053174325	0.302899599	-3.476974972	0.000507105	0.002597971	Acot8
ENSMUSG0C 261.4509364	-1.740829892	0.500742849	-3.476494759	0.000508014	0.002602066	NA
ENSMUSG0C 4.484324368	-3.540435447	1.018423319	-3.476388827	0.000508215	0.002602533	Cd209a
ENSMUSG0C 45.21053184	-1.519493012	0.437244719	-3.475154634	0.000510559	0.002613974	Olfr1028
ENSMUSG0C 11.50429098	-1.872244067	0.538888019	-3.474272947	0.00051224	0.002621449	4833412C05Rik
ENSMUSG0C 5313.340567	-0.741969145	0.213648632	-3.47284763	0.000514968	0.002634435	Ppp1r15b
ENSMUSG0C 93.04880831	-1.047693045	0.301682682	-3.472831252	0.000514999	0.002634435	NA
ENSMUSG0C 6660.72954	-2.338130887	0.673455455	-3.47184193	0.000516901	0.002640751	Ccl25
ENSMUSG0C 261.2481084	-1.506435747	0.433912755	-3.471748014	0.000517081	0.002641107	Sspn
ENSMUSG0C 42.72039511	-1.558072555	0.448841408	-3.471320889	0.000517905	0.002644743	Skap1
ENSMUSG0C 590.4123923	-0.906845758	0.261375209	-3.46951711	0.000521395	0.002660861	Gfm2
ENSMUSG0C 93.85790269	-1.792834812	0.516830953	-3.468899847	0.000522594	0.002666398	Adamts8
ENSMUSG0C 999.41622	-1.031196929	0.297290313	-3.46865298	0.000523075	0.002667703	Fbxo8
ENSMUSG0C 2134.477024	-0.632533322	0.182382248	-3.468173744	0.000524008	0.002671318	Ubap1
ENSMUSG0C 3267.465026	-1.150133769	0.331658612	-3.46782422	0.00052469	0.002674125	Fam83e
ENSMUSG0C 26.09267243	-1.911737244	0.55129474	-3.467722625	0.000524889	0.002674125	Cyp2d34
ENSMUSG0C 39.72410468	-1.006594792	0.290332316	-3.467043575	0.000526217	0.0026797	Frem1
ENSMUSG0C 2062.666421	-0.988954196	0.285743729	-3.460983025	0.000538207	0.002736652	Insr
ENSMUSG0C 25194.93983	-2.038779419	0.589066088	-3.461036816	0.000538099	0.002736652	Tff3
ENSMUSG0C 725.4831286	-1.549576709	0.447752297	-3.460790084	0.000538593	0.002738028	BC030870
ENSMUSG0C 430.5820074	-0.7643833	0.220934918	-3.459766822	0.000540643	0.002746103	9130011E15Rik
ENSMUSG0C 122.5280445	-1.328993574	0.384158769	-3.459490404	0.000541199	0.002747967	Mfsd2b
ENSMUSG0C 71.66434095	-1.426484553	0.412519094	-3.457984305	0.000544233	0.002760205	NA
ENSMUSG0C 1233.118818	-0.956634802	0.276770285	-3.456421641	0.000547398	0.00277389	Phf1
ENSMUSG0C 1126.88772	-0.96486183	0.279197009	-3.455845874	0.000548569	0.002779229	Lmbr1l
ENSMUSG0C 23.79039775	-2.571864255	0.744586271	-3.45408498	0.000552163	0.002796247	Mroh6
ENSMUSG0C 38.06353204	-2.586068001	0.748858682	-3.45334582	0.000553679	0.002802129	Il9r
ENSMUSG0C 491.598223	-0.806543575	0.233604279	-3.452606173	0.000555199	0.002808028	Ccdc64
ENSMUSG0C 683.95465	-1.091864111	0.316317124	-3.451802099	0.000556856	0.002814012	Irak4
ENSMUSG0C 2063.182975	-1.162384109	0.33684613	-3.450786595	0.000558955	0.00282342	Crat
ENSMUSG0C 2792.983026	-0.674305679	0.195463593	-3.449776348	0.000561051	0.002832802	Nedd9
ENSMUSG0C 176.7910619	-0.788843303	0.228765836	-3.448256595	0.000564218	0.00284758	NA
ENSMUSG0C 2725.726878	-0.487847433	0.141520972	-3.447174127	0.000566483	0.0028578	Skiv2l
ENSMUSG0C 257.817491	-1.477523667	0.428704951	-3.446481467	0.000567938	0.002864527	Speg
ENSMUSG0C 11298.12422	-0.681348311	0.197722863	-3.445976353	0.000569	0.002868669	Aes
ENSMUSG0C 2289.891057	-2.787986919	0.809161666	-3.445525211	0.000569951	0.002871633	Slc7a15
ENSMUSG0C 205.8449361	-1.227733975	0.356400675	-3.444813835	0.000571453	0.002878068	Rhebl1
ENSMUSG0C 1232.934796	-0.67020743	0.194617981	-3.443707644	0.000573796	0.002887943	Dctn6
ENSMUSG0C 8109.388218	-0.890710869	0.258658102	-3.443583872	0.000574059	0.002888654	Actr3
ENSMUSG0C 14.46016816	-2.112531152	0.613539781	-3.443185293	0.000574905	0.00289169	Lin7b
ENSMUSG0C 2.239544296	-3.509523541	1.019260944	-3.443204177	0.000574865	0.00289169	Fbxw15
ENSMUSG0C 967.7097158	-1.371446179	0.398342525	-3.442881675	0.000575551	0.002893712	Kcnj8
ENSMUSG0C 2609.948435	-1.318756615	0.383094045	-3.44238349	0.000576612	0.002898434	Reep6
ENSMUSG0C 426.580772	-0.689911978	0.200463013	-3.441592375	0.000578301	0.002906308	Nr2c1
ENSMUSG0C 2116.910454	-0.879939889	0.255715095	-3.441094817	0.000579365	0.002909811	Tacc2
ENSMUSG0C 3.181710187	-3.367502648	0.978772844	-3.440535429	0.000580564	0.002915216	Krtap3-1
ENSMUSG0C 1004.295237	-0.734702622	0.213605283	-3.439533954	0.000582717	0.002924787	AW549877
ENSMUSG0C 4051.641345	-2.607284445	0.758363522	-3.438040426	0.00058594	0.002939104	Btnl1
ENSMUSG0C 913.1689624	-1.844809533	0.536665163	-3.437542923	0.000587018	0.002943887	NA
ENSMUSG0C 2055.944774	-0.628326306	0.182795452	-3.437319133	0.000587503	0.002945699	Ric8a
ENSMUSG0C 17.46425675	-1.875173011	0.545645519	-3.436613964	0.000589034	0.002951197	Stab2
ENSMUSG0C 54.55130661	-2.480897281	0.721975703	-3.436261456	0.000589801	0.002954106	Srd5a2
ENSMUSG0C 21.22769517	-1.355272271	0.394477969	-3.435609535	0.000591222	0.002959975	Unc79
ENSMUSG0C 1713.052469	-0.854348389	0.248766114	-3.434343907	0.00059399	0.002970532	Gse1
ENSMUSG0C 323.0374758	-0.727208149	0.211828573	-3.43300311	0.000596935	0.002983546	Amn1



ENSMUSG0C 427.3424817	-1.862206805	0.542527875	-3.432462904	0.000598126	0.002988867	Ston1
ENSMUSG0C 1869.748538	-1.329178095	0.387289047	-3.432005383	0.000599136	0.002993284	Mpst
ENSMUSG0C 13.96684985	-1.536909674	0.447894624	-3.431409067	0.000600454	0.002998611	Hpca
ENSMUSG0C 1623.452046	-0.445330868	0.129789526	-3.431177238	0.000600968	0.003000545	Smad5
ENSMUSG0C 85.01009038	-1.033452322	0.301259527	-3.430438645	0.000602606	0.003007461	Arhgap33
ENSMUSG0C 536.5857421	-1.57300466	0.458632047	-3.429774851	0.000604082	0.003014194	Flrt3
ENSMUSG0C 2131.041347	-0.74983669	0.218632933	-3.429660302	0.000604337	0.003014834	Nfkb1
ENSMUSG0C 132.6665414	-1.128512071	0.329096773	-3.429119222	0.000605543	0.003020216	Prdm9
ENSMUSG0C 1798.211461	-1.040079011	0.303335689	-3.428805278	0.000606244	0.003022443	Arhgap32
ENSMUSG0C 632.5031458	-1.059560983	0.309134164	-3.427511763	0.00060914	0.003036242	Usp53
ENSMUSG0C 2270.694078	-1.048752086	0.306011734	-3.427162985	0.000609923	0.003039507	Chmp1b
ENSMUSG0C 8.429707661	-1.833434323	0.535016638	-3.426873471	0.000610574	0.003041473	Galnt13
ENSMUSG0C 2110.738567	-0.992056747	0.289702534	-3.424397893	0.000616163	0.003066746	Secisbp2l
ENSMUSG0C 1797.558581	-1.153806293	0.33708809	-3.422862831	0.000619653	0.00308347	Snx7
ENSMUSG0C 10803.91737	-1.619568986	0.473216671	-3.422468155	0.000620554	0.003087303	Hadh
ENSMUSG0C 69.25843818	-1.899081037	0.555113917	-3.421065443	0.000623763	0.003100674	NA
ENSMUSG0C 1550.152536	-0.854645071	0.249880554	-3.420214413	0.000625718	0.003107789	Pard3
ENSMUSG0C 1322.215153	-0.814226551	0.238088846	-3.419843324	0.000626572	0.003111381	Ncoa2
ENSMUSG0C 509.5346659	-1.385494864	0.405150843	-3.419701301	0.000626899	0.003112355	Slc6a7
ENSMUSG0C 4391.871737	-1.209279903	0.353723328	-3.418716856	0.000629172	0.003121679	Rmnd5a
ENSMUSG0C 12.78180904	-1.922540233	0.562367005	-3.418657594	0.000629309	0.003121707	Sctr
ENSMUSG0C 698.796288	-0.861695675	0.252069592	-3.418483238	0.000629712	0.003123056	Med12
ENSMUSG0C 5001.553389	-1.629060586	0.476564389	-3.418343086	0.000630036	0.003124012	Dnpep
ENSMUSG0C 8092.097342	-1.056233552	0.309019071	-3.418020605	0.000630783	0.003127064	Cab39
ENSMUSG0C 693.3663477	-1.323043451	0.387129117	-3.417576703	0.000631813	0.003130861	Thns12
ENSMUSG0C 2524.931363	-0.707934705	0.20715094	-3.417482456	0.000632032	0.003131292	Sp1
ENSMUSG0C 4351.431805	-0.789861849	0.231191616	-3.416481376	0.00063436	0.003142172	Nbr1
ENSMUSG0C 59.00948861	-1.502807653	0.439886073	-3.416356517	0.000634651	0.003142958	Agtr1a
ENSMUSG0C 2669.248306	-1.080310999	0.316224444	-3.416279225	0.000634831	0.003143195	Slc35e1
ENSMUSG0C 1924.387181	-1.19632592	0.350295584	-3.41518984	0.000637376	0.003153822	Cyp4f16
ENSMUSG0C 164.6887734	-2.480658296	0.726464935	-3.414697913	0.000638528	0.003158865	NA
ENSMUSG0C 2466.675476	-0.975944002	0.285833129	-3.414383793	0.000639265	0.003161193	Chuk
ENSMUSG0C 5823.804599	-1.16368799	0.340832849	-3.414248345	0.000639582	0.003162106	Klf3
ENSMUSG0C 377.2223318	-1.151773475	0.33735574	-3.414121474	0.00063988	0.003162921	Lactb
ENSMUSG0C 5.308957137	-2.909686324	0.852271098	-3.414038481	0.000640075	0.003163227	NA
ENSMUSG0C 1061.943239	-0.820100616	0.240270127	-3.413244196	0.000641944	0.003171801	Kif2a
ENSMUSG0C 666.4301357	-0.940646594	0.275615261	-3.412897348	0.000642761	0.00317452	Ccdc68
ENSMUSG0C 1093.95376	-2.662226558	0.780121317	-3.412580196	0.00064351	0.003177556	Acot12
ENSMUSG0C 7.713823742	-1.976378214	0.579179618	-3.412375284	0.000643994	0.003179285	NA
ENSMUSG0C 14.07924861	-1.957105655	0.573558366	-3.412217082	0.000644368	0.00318047	Fmn2
ENSMUSG0C 1438.546989	-2.416390706	0.708319462	-3.411441922	0.000646203	0.00318754	Ces1d
ENSMUSG0C 1431.620637	-0.690206936	0.202373286	-3.410563468	0.000648288	0.003196498	Mau2
ENSMUSG0C 13356.07147	-1.050182545	0.307940248	-3.410345195	0.000648807	0.00319773	Vdac2
ENSMUSG0C 12.1865091	-1.671520231	0.49016971	-3.410084704	0.000649427	0.003199459	NA
ENSMUSG0C 1726.152501	-0.539261711	0.158148048	-3.409853727	0.000649977	0.00320128	Trim26
ENSMUSG0C 194.9955473	-1.056160573	0.309741186	-3.409816388	0.000650066	0.00320128	Pitpnm3
ENSMUSG0C 745.3872678	-0.57953256	0.169988031	-3.409255089	0.000651405	0.003206545	Stambp
ENSMUSG0C 32.58776818	-1.803845886	0.529130422	-3.409076118	0.000651833	0.003207985	NA
ENSMUSG0C 126.2390231	-1.631172365	0.478511256	-3.408848474	0.000652377	0.003209015	Tnfaip8l3
ENSMUSG0C 2256.836295	-0.922731217	0.270816862	-3.407214795	0.000656295	0.003225266	Nrip1
ENSMUSG0C 2266.013643	-2.062661245	0.605511503	-3.406477388	0.00065807	0.003231985	Tmem37
ENSMUSG0C 5366.085497	-0.771706269	0.226623653	-3.405232682	0.000661077	0.003245411	BC005537
ENSMUSG0C 1100.968718	-1.697993989	0.498693051	-3.404888011	0.000661912	0.003248839	Aqp11
ENSMUSG0C 2588.7807	-0.956270823	0.280886635	-3.404472501	0.00066292	0.003252441	Cx3cl1
ENSMUSG0C 8079.618756	-1.096521697	0.322221701	-3.403003872	0.000666493	0.003268624	Prr13
ENSMUSG0C 829.4132461	-0.88639486	0.260517398	-3.402440174	0.00066787	0.003274698	Kit
ENSMUSG0C 32.14466752	-1.389180652	0.408459013	-3.401028277	0.000671329	0.003288944	NA
ENSMUSG0C 94.33511485	-1.731413896	0.509359136	-3.39920063	0.000675831	0.003308181	Bdkrb2
ENSMUSG0C 264.848745	-1.524598216	0.448523126	-3.399151858	0.000675952	0.003308181	Tacr1
ENSMUSG0C 571.9953215	-0.789543368	0.232291298	-3.398936488	0.000676484	0.003310105	Usp45
ENSMUSG0C 2239.554728	-0.776749528	0.228548739	-3.398616547	0.000677276	0.003311933	Kansl3
ENSMUSG0C 28.73716377	-1.134639354	0.333894468	-3.398197521	0.000678314	0.003316327	Olfr46
ENSMUSG0C 7605.572851	-0.905704686	0.266590805	-3.397359053	0.000680396	0.003325822	Ccni
ENSMUSG0C 152.8048192	-1.512933478	0.445606837	-3.395220521	0.000685733	0.003349154	NA
ENSMUSG0C 3821.246905	-1.839685215	0.542047658	-3.393954734	0.000688911	0.003362598	Tkfc
ENSMUSG0C 2983.768069	-1.180516457	0.347837108	-3.393877277	0.000689106	0.003362858	NA
ENSMUSG0C 952.7001169	-0.804188596	0.237032469	-3.392736025	0.000691983	0.003376206	Zkscan3

ENSMUSG0C 4935.642105	-1.298000573	0.382799305	-3.390812248	0.000696858	0.003398337	Ugcg
ENSMUSG0C 7.771747301	-2.099043333	0.619141911	-3.390245912	0.0006983	0.00340353	NA
ENSMUSG0C 27.25324013	-1.24993093	0.368737924	-3.389754204	0.000699553	0.003408241	NA
ENSMUSG0C 4002.952211	-0.892492792	0.263300909	-3.389630497	0.000699869	0.00340908	Tmem30b
ENSMUSG0C 49.03049448	-2.240452532	0.661025813	-3.3893571	0.000700567	0.003411177	Ces2d-ps
ENSMUSG0C 3.666016428	-2.823527773	0.833293632	-3.388394756	0.00070303	0.003420217	Cpb1
ENSMUSG0C 809.1841336	-1.026262397	0.302870325	-3.388454768	0.000702876	0.003420217	Tsc22d2
ENSMUSG0C 2111.278253	-2.31944344	0.684683019	-3.387616426	0.000705028	0.003427183	Maob
ENSMUSG0C 31.79005781	-1.166082863	0.344387638	-3.38596028	0.000709296	0.003445113	Efnb3
ENSMUSG0C 874.8402245	-1.790138557	0.528799069	-3.385290674	0.000711029	0.003452823	Trim40
ENSMUSG0C 1329.727918	-1.383887529	0.408882769	-3.384558199	0.000712929	0.003460634	Prkg2
ENSMUSG0C 27.97425048	-1.14546729	0.338533783	-3.383612942	0.000715388	0.00347115	St18
ENSMUSG0C 877.0330326	-0.88102895	0.260404456	-3.383309807	0.000716178	0.003474275	Pcx
ENSMUSG0C 42.74687598	-2.272319512	0.671983319	-3.381511784	0.000720881	0.003494951	Gimap7
ENSMUSG0C 13.31402118	-2.247488024	0.665008273	-3.379639195	0.00072581	0.003514544	Cyp2w1
ENSMUSG0C 515.9373254	-0.936981199	0.277356057	-3.378261179	0.000729458	0.003530765	Bdp1
ENSMUSG0C 2757.852301	-0.78723014	0.233040743	-3.378079424	0.00072994	0.00353238	Zdhhc5
ENSMUSG0C 12.24403107	-1.797247345	0.532051121	-3.377959887	0.000730257	0.003533196	NA
ENSMUSG0C 16.0712611	-2.433782014	0.720540479	-3.377717262	0.000730902	0.003534875	Foxp3
ENSMUSG0C 10.14700196	-2.285516986	0.676737061	-3.377259968	0.000732118	0.003540037	Abcb11
ENSMUSG0C 3388.773624	-1.001064562	0.296490414	-3.376380868	0.000734462	0.003550646	Suclg1
ENSMUSG0C 29.6249346	-2.100684102	0.622305443	-3.375647966	0.000736421	0.003557944	Clec2i
ENSMUSG0C 146.3374464	-2.199832103	0.652012232	-3.373912323	0.00074108	0.003578998	NA
ENSMUSG0C 1205.447099	-0.786592026	0.233160774	-3.3736036	0.000741911	0.003582285	Dock6
ENSMUSG0C 237.1438604	-0.90473495	0.268187632	-3.373514815	0.000742151	0.003582712	Fbxl8
ENSMUSG0C 6.297110388	-2.203047105	0.653104632	-3.37319167	0.000743022	0.003586191	NA
ENSMUSG0C 29.87230942	-1.113334577	0.330334328	-3.370326618	0.000750791	0.003620012	NA
ENSMUSG0C 775.3275952	-0.883700808	0.26228817	-3.369198118	0.000753872	0.003634129	Tdp2
ENSMUSG0C 812.275928	-1.182623775	0.351115877	-3.368186549	0.000756644	0.003643054	Trim30d
ENSMUSG0C 2.676562374	-3.24934227	0.965021382	-3.367119454	0.000759578	0.00365644	NA
ENSMUSG0C 8.308783271	-1.945640424	0.577900723	-3.366738174	0.000760629	0.003660015	9430060I03Rik
ENSMUSG0C 463.1941293	-0.661175261	0.196410775	-3.366288131	0.000761871	0.00366525	Mterf3
ENSMUSG0C 1606.529433	-0.905975589	0.269186529	-3.365605233	0.000763759	0.003672847	Jmjd1c
ENSMUSG0C 2162.668733	-0.809852565	0.240685449	-3.364775765	0.000766059	0.00368316	Pik3r1
ENSMUSG0C 9.708891967	-3.192657591	0.949043726	-3.364078496	0.000767997	0.003691731	4931440F15Rik
ENSMUSG0C 1230.616684	-1.359222225	0.404081562	-3.363732356	0.000768961	0.003695616	D8Ertd82e
ENSMUSG0C 1478.990085	-1.149325374	0.341740269	-3.363154644	0.000770572	0.00370261	Fam102b
ENSMUSG0C 32.30343854	-2.609735781	0.776175601	-3.362300719	0.000772959	0.003711828	Tmem89
ENSMUSG0C 12.84520804	-2.369183706	0.704701575	-3.36196738	0.000773893	0.003715561	4933405D12Rik
ENSMUSG0C 7877.836693	-1.557224816	0.463463854	-3.359970364	0.000779508	0.00374101	Gpd1
ENSMUSG0C 65.90413933	-1.805780655	0.537630169	-3.358778504	0.000782878	0.003753607	NA
ENSMUSG0C 38.54917755	-1.45740334	0.433907301	-3.358789625	0.000782846	0.003753607	NA
ENSMUSG0C 745.5239832	-0.658627048	0.196100124	-3.358626362	0.000783309	0.003754699	Gnb5
ENSMUSG0C 23.77338751	-2.156950883	0.642390462	-3.357694442	0.000785954	0.00376662	Timd4
ENSMUSG0C 1618.025484	-0.526073435	0.156701287	-3.357173665	0.000787436	0.0037722	Ube4a
ENSMUSG0C 14246.48492	-0.752208896	0.22415456	-3.355759954	0.000791472	0.003790005	Rac1
ENSMUSG0C 33.08448363	-2.204914059	0.657047064	-3.355793186	0.000791377	0.003790005	NA
ENSMUSG0C 2892.310605	-0.664672013	0.198118091	-3.354928422	0.000793855	0.00380065	Micu2
ENSMUSG0C 3240.344446	-0.764781399	0.227980279	-3.35459454	0.000794814	0.003804473	Cds2
ENSMUSG0C 2453.307575	-1.927911536	0.574719657	-3.354525135	0.000795013	0.003804661	Slc16a10
ENSMUSG0C 4449.368264	-1.04981975	0.312977317	-3.354299792	0.000795661	0.003806994	Uqcrfs1
ENSMUSG0C 3321.801096	-0.519628408	0.154941518	-3.35370672	0.000797368	0.003813626	Pbxip1
ENSMUSG0C 12.10750798	-1.74083326	0.519437358	-3.351382479	0.000804092	0.003843461	NA
ENSMUSG0C 1890.595155	-0.795029465	0.237237771	-3.351192605	0.000804643	0.00384455	Chmp6
ENSMUSG0C 4959.560952	-1.168906265	0.348810918	-3.351117195	0.000804862	0.003844824	Abhd17c
ENSMUSG0C 667.4542853	-1.555627518	0.464282072	-3.350608632	0.000806342	0.003851117	Abhd3
ENSMUSG0C 1826.280751	-0.669747568	0.199941357	-3.349720028	0.000808933	0.003861939	Ralgps2
ENSMUSG0C 242.7308368	-2.10489411	0.628623875	-3.34841579	0.00081275	0.003878603	NA
ENSMUSG0C 3.207449745	-3.00130773	0.896826229	-3.346587816	0.000818128	0.003901132	Mir6909
ENSMUSG0C 77.19724928	-1.441803266	0.430836346	-3.346521897	0.000818322	0.003901277	Mroh7
ENSMUSG0C 5868.659869	-1.258955186	0.376262615	-3.345948109	0.000820017	0.003908574	Neu1
ENSMUSG0C 76.76938664	-0.909900851	0.271987591	-3.345376334	0.00082171	0.00391507	Efcab2
ENSMUSG0C 40.46173149	-1.745708281	0.521865723	-3.345129226	0.000822442	0.003917775	NA
ENSMUSG0C 4977.625996	-0.852937345	0.255040499	-3.344321183	0.000824842	0.003926842	Trim25
ENSMUSG0C 1447.304093	-0.547394405	0.163716283	-3.343555052	0.000827123	0.003936124	Vps4a
ENSMUSG0C 1518.794334	-1.183531447	0.35399048	-3.343399084	0.000827588	0.00393676	Serinc5
ENSMUSG0C 446.8632344	-0.729939391	0.218320609	-3.343428704	0.0008275	0.00393676	Ralgps1

ENSMUSG0C 987.7875627	-1.039648313	0.310989719	-3.343031128	0.000828686	0.003941194	NA
ENSMUSG0C 18.29313402	-1.394074886	0.417373411	-3.340114271	0.000837439	0.003978046	Gria2
ENSMUSG0C 26.12218491	-1.310369094	0.392409143	-3.339292973	0.000839919	0.003986638	Mast1
ENSMUSG0C 3260.715789	-1.086691674	0.325463224	-3.338907728	0.000841085	0.003991373	Wasl
ENSMUSG0C 1303.01731	-2.4203782	0.724975749	-3.338564365	0.000842125	0.003995511	Otc
ENSMUSG0C 871.3336855	-1.574849055	0.471728986	-3.338461495	0.000842437	0.003996193	NA
ENSMUSG0C 1238.327155	-0.757510603	0.226952223	-3.337753622	0.000844586	0.004004788	Ap1g2
ENSMUSG0C 9.990905966	-2.046018171	0.613121857	-3.337049801	0.000846728	0.004012396	Nmu
ENSMUSG0C 3328.752831	-0.955050759	0.286277005	-3.336107132	0.000849604	0.004022961	Nectin3
ENSMUSG0C 471.3928375	-0.96785107	0.290141565	-3.335789103	0.000850577	0.004026763	Pfkfb2
ENSMUSG0C 1992.224016	-2.158857881	0.647397729	-3.33467015	0.000854006	0.004042195	Abhd11os
ENSMUSG0C 454.7185531	-1.250936315	0.375317639	-3.333006992	0.000859128	0.004063197	Mtx3
ENSMUSG0C 7.823693444	-2.042792901	0.612977069	-3.332576379	0.000860458	0.004067871	NA
ENSMUSG0C 6.202908365	-2.3731258	0.712120771	-3.33247659	0.000860767	0.00406852	NA
ENSMUSG0C 3.92773633	-2.835149387	0.85086069	-3.332095865	0.000861946	0.004070901	NA
ENSMUSG0C 2301.881022	-0.75873031	0.227734325	-3.331646689	0.000863338	0.004076616	Azi2
ENSMUSG0C 302.1388289	-1.796372996	0.539381007	-3.330434279	0.000867106	0.00409197	Glyctk
ENSMUSG0C 86.31759129	-1.180145072	0.354381374	-3.33015547	0.000867975	0.004095256	Tril
ENSMUSG0C 82.5894389	-1.018989445	0.305999815	-3.330032883	0.000868357	0.004096246	Tmppe
ENSMUSG0C 912.2220069	-0.801791369	0.240785521	-3.329898604	0.000868776	0.004097408	Naaa
ENSMUSG0C 3.466245418	-3.043361232	0.914069503	-3.329463702	0.000870134	0.004102998	Defa5
ENSMUSG0C 14.27079194	-1.983447676	0.595980902	-3.328038983	0.000874596	0.004121585	NA
ENSMUSG0C 15.93999954	-1.50077606	0.451036905	-3.327390825	0.000876633	0.004129546	NA
ENSMUSG0C 21.13429015	-1.35978037	0.40900217	-3.324628738	0.000885363	0.004168192	Zfp458
ENSMUSG0C 1883.904174	-2.330205133	0.701099118	-3.323645791	0.00088849	0.004177942	Btnl2
ENSMUSG0C 298.231388	-0.729930652	0.219604473	-3.323842375	0.000887864	0.004177942	Adck2
ENSMUSG0C 20633.13988	-1.369204865	0.411955325	-3.323673181	0.000888402	0.004177942	Lgals3
ENSMUSG0C 140.0847039	-1.943031915	0.584765701	-3.322752876	0.000891338	0.004189679	Hoxb3
ENSMUSG0C 110.7178117	-1.500677231	0.451685991	-3.322390466	0.000892497	0.004193465	NA
ENSMUSG0C 2167.40526	-1.02037146	0.307166977	-3.321878772	0.000894135	0.004200332	Tbc1d15
ENSMUSG0C 321.4788804	-1.568931084	0.472367521	-3.32142032	0.000895606	0.004206407	Rasgrf2
ENSMUSG0C 1733.828173	-0.750324313	0.226054279	-3.319221898	0.000902687	0.004236315	Mdm4
ENSMUSG0C 381.491062	-1.39920953	0.421602398	-3.318789308	0.000904086	0.004242044	Syne1
ENSMUSG0C 4.963557693	-2.442877896	0.736212307	-3.318170415	0.000906092	0.004248099	Vsnl1
ENSMUSG0C 548.5026894	-0.973368305	0.293484052	-3.316596934	0.00091121	0.004268724	Ncoa4
ENSMUSG0C 3436.857755	-0.618607073	0.186594166	-3.315254103	0.000915599	0.004288438	NA
ENSMUSG0C 227.8740328	-1.157976408	0.349329682	-3.314852607	0.000916915	0.004293756	Daam2
ENSMUSG0C 1778.950991	-0.735567454	0.221921642	-3.314536825	0.000917951	0.004296915	Krcc1
ENSMUSG0C 80.25717153	-0.867087708	0.261612294	-3.314399702	0.000918401	0.004298176	Fam120c
ENSMUSG0C 8.126849005	-2.128708866	0.642394364	-3.313710371	0.000920668	0.004307937	Hapln1
ENSMUSG0C 7219.390886	-1.397219253	0.421657732	-3.313633654	0.000920921	0.00430827	Sgpl1
ENSMUSG0C 1964.339363	-0.758459094	0.22899509	-3.312119459	0.00092592	0.004329952	Tbc1d13
ENSMUSG0C 589.260098	-1.622863384	0.490063629	-3.311536067	0.000927853	0.004338136	Inpp5j
ENSMUSG0C 5.85148681	-2.324152416	0.701854085	-3.311446732	0.000928149	0.004338668	Trim9
ENSMUSG0C 255.4311822	-1.531575876	0.462648043	-3.310455751	0.000931442	0.004350225	4833418N02Rik
ENSMUSG0C 623.2955847	-0.646764831	0.195399318	-3.309964633	0.000933078	0.004356563	E2f5
ENSMUSG0C 2919.932368	-0.49563411	0.149783084	-3.309012597	0.000936256	0.00436797	Ube3b
ENSMUSG0C 12416.14331	-0.859207054	0.259978455	-3.304916376	0.000950047	0.004427094	Taldo1
ENSMUSG0C 31.90634788	-1.207939192	0.365542981	-3.304506595	0.000951437	0.004432702	Ppil6
ENSMUSG0C 883.4197768	-0.773049388	0.234003081	-3.303586369	0.000954566	0.004445532	Sh3yl1
ENSMUSG0C 146.3660201	-0.733135568	0.22194824	-3.303182616	0.000955941	0.004450194	Zfp764
ENSMUSG0C 41.13711225	-2.021532306	0.61211989	-3.302510403	0.000958235	0.004458773	NA
ENSMUSG0C 257.7212961	-0.970728889	0.293959978	-3.30224848	0.000959131	0.004461544	Slc35d2
ENSMUSG0C 3294.481737	-0.813956048	0.246705207	-3.299306312	0.000969241	0.004503283	Qdpr
ENSMUSG0C 17.18887456	-1.96920898	0.596874628	-3.299200347	0.000969607	0.004504102	Dnaic1
ENSMUSG0C 988.3565681	-1.223219275	0.370805207	-3.298819035	0.000970925	0.004507581	Rasa4
ENSMUSG0C 28.06933634	-1.655870076	0.501971593	-3.298732636	0.000971224	0.004508087	NA
ENSMUSG0C 102.3035769	-0.938067163	0.284390359	-3.298519569	0.000971961	0.004510628	Klhl28
ENSMUSG0C 565.1181584	-1.618423436	0.490734384	-3.297962172	0.000973893	0.004515949	Dll1
ENSMUSG0C 837.6350898	-0.767896099	0.23284097	-3.297942371	0.000973961	0.004515949	Smad7
ENSMUSG0C 590.6188055	-0.958096959	0.290516011	-3.297914475	0.000974058	0.004515949	Als2
ENSMUSG0C 328.9948159	-1.48696328	0.451176076	-3.295749397	0.000981595	0.004547344	NA
ENSMUSG0C 9.410875167	-2.129244133	0.646390002	-3.294054868	0.000987532	0.004572172	Gm15293
ENSMUSG0C 328.69746	-1.15284827	0.350004195	-3.293812724	0.000988383	0.004575221	Nrarp
ENSMUSG0C 574.4662204	-1.773493116	0.538444419	-3.293734793	0.000988657	0.004575598	Gm3336
ENSMUSG0C 570.3573668	-0.752681838	0.228638843	-3.292012096	0.000994733	0.00459899	Zfp654
ENSMUSG0C 2981.137358	-0.725850392	0.220521901	-3.291511586	0.000996505	0.004604741	Chd3

ENSMUSG0C 528.7490516	-1.325619263	0.403001419	-3.289366241	0.001004133	0.00463638	Tmc7
ENSMUSG0C 3.81224756	-3.605507611	1.096222548	-3.289028871	0.001005337	0.004641039	NA
ENSMUSG0C 1301.409196	-0.971539661	0.295401524	-3.288878296	0.001005875	0.004642621	Arhgef3
ENSMUSG0C 644.2055994	-1.033049494	0.314203052	-3.287840414	0.001009591	0.004657055	Cd59a
ENSMUSG0C 8974.959449	-1.55810228	0.474012341	-3.287050034	0.001012428	0.004667427	Klf6
ENSMUSG0C 3560.694495	-1.392478789	0.423684564	-3.286593156	0.001014072	0.004674098	Pcsk5
ENSMUSG0C 201.9796728	-0.993949606	0.302511793	-3.285655734	0.001017453	0.004686951	Ssbp2
ENSMUSG0C 2094.668539	-0.901020679	0.274235236	-3.285575881	0.001017741	0.004687371	Dram2
ENSMUSG0C 2.019252261	-3.368682195	1.025449801	-3.285077622	0.001019543	0.004693849	Casr
ENSMUSG0C 1534.192492	-0.639198265	0.194591461	-3.284821768	0.001020469	0.004696374	Ankrd13c
ENSMUSG0C 296.9899587	-1.871892718	0.570289776	-3.282353631	0.001029444	0.004733929	Ciita
ENSMUSG0C 5942.876967	-2.370624879	0.72223411	-3.282398276	0.001029281	0.004733929	Ces2c
ENSMUSG0C 4.273786531	-2.710450368	0.825792661	-3.282240805	0.001029856	0.004734907	Lrrtm1
ENSMUSG0C 14.18561359	-1.889430554	0.575873043	-3.280984547	0.001034454	0.004754206	Sostdc1
ENSMUSG0C 10.62617163	-2.302467742	0.70199863	-3.279874979	0.001038531	0.004771097	Olfir827
ENSMUSG0C 781.5467216	-0.84400942	0.257453972	-3.278292485	0.001044371	0.004796072	Fgd6
ENSMUSG0C 6.642365262	-2.173617722	0.663276063	-3.277093572	0.001048816	0.004814623	NA
ENSMUSG0C 5.122009284	-2.444260275	0.745906737	-3.276897974	0.001049543	0.004817029	Tenm2
ENSMUSG0C 26.51010926	-2.646300918	0.808184417	-3.274377558	0.00105895	0.00485739	NA
ENSMUSG0C 494.8994856	-0.68320581	0.20867122	-3.274077798	0.001060074	0.004861607	Wdr20
ENSMUSG0C 1187.899771	-1.002518383	0.306275585	-3.273255952	0.001063162	0.004873884	Ttc38
ENSMUSG0C 895.2229485	-0.892896795	0.272970569	-3.271036871	0.001071539	0.004909448	Fbxo9
ENSMUSG0C 20.94553525	-1.323212414	0.404556443	-3.27077331	0.001072538	0.004913078	Kcnc1
ENSMUSG0C 1520.442791	-1.782068664	0.544877835	-3.27058388	0.001073257	0.004915422	Cd55
ENSMUSG0C 2871.233488	-1.134878786	0.347027941	-3.270280724	0.001074408	0.004919745	Pcnx
ENSMUSG0C 11905.09932	-1.829170486	0.559409364	-3.269824574	0.001076142	0.004926735	Dgat1
ENSMUSG0C 2682.874924	-0.667512524	0.204205268	-3.268831072	0.001079928	0.004943113	Clk1
ENSMUSG0C 454.4183055	-0.635900993	0.194576191	-3.268133622	0.001082592	0.004954357	Snrnp48
ENSMUSG0C 693.7231193	-0.814830175	0.249366451	-3.267601438	0.00108463	0.004962725	Tcta
ENSMUSG0C 4276.229648	-0.485492037	0.148635783	-3.266320038	0.00108955	0.004983319	Actr1a
ENSMUSG0C 7.55388566	-2.437218659	0.746265429	-3.265887128	0.001091217	0.004989983	Nmur2
ENSMUSG0C 58.57761883	-1.376167106	0.421390994	-3.26577247	0.001091659	0.004991043	Nrap
ENSMUSG0C 2178.003022	-0.997278367	0.305396013	-3.265525165	0.001092613	0.004994442	Ppip5k2
ENSMUSG0C 11.96143711	-1.696552571	0.519708119	-3.264433456	0.001096832	0.005008909	Fat3
ENSMUSG0C 3467.643528	-0.790291262	0.242196788	-3.263012976	0.001102345	0.005031182	Ubqln1
ENSMUSG0C 682.2554188	-0.91124853	0.279278176	-3.262870534	0.001102899	0.005032744	Aldh3b1
ENSMUSG0C 40028.73763	-1.015526333	0.311253592	-3.262697555	0.001103572	0.00503485	Anxa2
ENSMUSG0C 1381.498133	-0.563662862	0.172789867	-3.262129158	0.001105787	0.005042051	Faf2
ENSMUSG0C 4.477015556	-3.190627649	0.978075703	-3.262147949	0.001105714	0.005042051	NA
ENSMUSG0C 15.66217702	-2.014473795	0.617682126	-3.261343836	0.001108855	0.005055068	Gm10814
ENSMUSG0C 830.8795544	-0.708524309	0.217302702	-3.26054073	0.001112	0.005067859	Rufy3
ENSMUSG0C 4.42098141	-3.1482782	0.965575954	-3.260518438	0.001112087	0.005067859	Best2
ENSMUSG0C 1832.59202	-2.154223157	0.660748324	-3.260277898	0.001113031	0.005071186	Cidec
ENSMUSG0C 4.318524577	-2.662686555	0.817068164	-3.258830381	0.001118725	0.0050942	Gpr119
ENSMUSG0C 872.8846269	-0.523583086	0.160735308	-3.257424234	0.001124283	0.005116563	Casp9
ENSMUSG0C 452.2348983	-1.130681023	0.347146975	-3.257067195	0.001125698	0.005122022	Cracr2a
ENSMUSG0C 1538.283102	-0.65242027	0.200365904	-3.256144172	0.001129364	0.00513748	Akap11
ENSMUSG0C 2709.273506	-0.678917152	0.208506042	-3.256103007	0.001129528	0.00513748	Wwp2
ENSMUSG0C 15.03275352	-1.453097364	0.446418021	-3.255015022	0.001133864	0.005156215	Zfp982
ENSMUSG0C 385.3666489	-0.928484891	0.285363557	-3.253691188	0.00113916	0.005177328	Pard3b
ENSMUSG0C 33.1848787	-1.515404111	0.465829952	-3.253127249	0.001141424	0.005186622	Thrsp
ENSMUSG0C 5.246374288	-2.460836838	0.756514071	-3.252863273	0.001142485	0.005189651	NA
ENSMUSG0C 46.55987606	-1.914290249	0.588569468	-3.252445723	0.001144164	0.005196095	NA
ENSMUSG0C 50.72117422	-1.190034595	0.365930557	-3.252077673	0.001145647	0.005201833	NA
ENSMUSG0C 2959.645983	-0.562787653	0.17308987	-3.251418768	0.001148306	0.005211913	Ap3d1
ENSMUSG0C 12.58474918	-2.033292803	0.625897895	-3.248601441	0.001159738	0.005254768	NA
ENSMUSG0C 384.531663	-2.311423967	0.711619279	-3.248118813	0.001161708	0.005262686	H2-BI
ENSMUSG0C 367.3171802	-1.089495978	0.335447215	-3.24789096	0.001162638	0.005265897	Nxt2
ENSMUSG0C 22.63080223	-1.531118301	0.471508654	-3.24727508	0.001165157	0.005276301	NA
ENSMUSG0C 7296.299137	-1.01293928	0.311952654	-3.247093002	0.001165903	0.005278671	Galnt6
ENSMUSG0C 1130.595908	-1.318295139	0.406189095	-3.245520758	0.00117236	0.005301844	Gskip
ENSMUSG0C 544.0463872	-0.768289503	0.236758461	-3.245035044	0.001174362	0.005309885	Iqsec2
ENSMUSG0C 1480.124927	-1.859910596	0.573222346	-3.244658219	0.001175917	0.005315904	Vwa1
ENSMUSG0C 4508.012273	-2.472391862	0.762080313	-3.244266805	0.001177534	0.005322202	Cyp2d26
ENSMUSG0C 2921.517595	-0.928464032	0.286207079	-3.244028887	0.001178518	0.005325637	Akap13
ENSMUSG0C 1378.557681	-1.169458765	0.360736527	-3.241864008	0.001187507	0.00536241	H2-DMa
ENSMUSG0C 775.7488936	-1.034356046	0.319174898	-3.240718655	0.001192288	0.005380698	Tysnd1



ENSMUSG0C 548.8660466	-0.874756111	0.269997418	-3.239868429	0.001195849	0.005393693	Piga
ENSMUSG0C 228.5683395	-1.0343013	0.319266848	-3.23961384	0.001196917	0.005397486	Acnat1
ENSMUSG0C 32.10171491	-2.508786707	0.774636708	-3.238662304	0.001200917	0.005412441	1700020N01Rik
ENSMUSG0C 363.407938	-0.884403404	0.273148492	-3.237811776	0.001204502	0.005423457	Cacna1c
ENSMUSG0C 6.82227749	-2.03650863	0.628973566	-3.237828646	0.001204431	0.005423457	NA
ENSMUSG0C 1094.847506	-1.004060299	0.310196608	-3.236851322	0.001208564	0.005437621	Pex16
ENSMUSG0C 838.9691813	-0.703155375	0.217311204	-3.235706956	0.001213419	0.005458432	Pigo
ENSMUSG0C 59.26371266	-1.088906765	0.336606377	-3.234955841	0.001216615	0.005470739	Dbnnd2
ENSMUSG0C 308308.2303	-2.415037242	0.74664064	-3.234537624	0.001218399	0.005477466	Apoa1
ENSMUSG0C 1664.408981	-0.823107826	0.254527707	-3.233863356	0.001221279	0.005486516	Sypa1
ENSMUSG0C 61.16727959	-1.274139947	0.394052864	-3.233423896	0.001223159	0.005492535	Sgip1
ENSMUSG0C 31786.93782	-2.46754187	0.763379108	-3.232393765	0.001227578	0.005509604	Sis
ENSMUSG0C 4.717274989	-2.37461103	0.734837097	-3.231479519	0.001231511	0.005525172	NA
ENSMUSG0C 972.1008934	-1.033883532	0.319969496	-3.23119405	0.001232742	0.005529649	Ttc39c
ENSMUSG0C 8.171813329	-2.546899194	0.788264624	-3.231020542	0.001233491	0.005531963	E130018O15Rik
ENSMUSG0C 3258.387269	-0.839334767	0.259800637	-3.230687872	0.001234927	0.005536314	Bak1
ENSMUSG0C 2.478383822	-3.169077689	0.981154217	-3.229948599	0.001238125	0.005549602	Cdh18
ENSMUSG0C 14.60983498	-2.10539207	0.65213627	-3.228454184	0.001244612	0.005575524	NA
ENSMUSG0C 6.108597863	-2.156805588	0.668161842	-3.227968814	0.001246726	0.005583939	NA
ENSMUSG0C 3920.990446	-0.948488749	0.294015722	-3.225979701	0.001255423	0.005616538	Ppm1a
ENSMUSG0C 1023.611572	-0.857699858	0.265903455	-3.225606292	0.001257061	0.005622812	Nipal3
ENSMUSG0C 135.2782102	-2.021736002	0.627210803	-3.223375605	0.001266893	0.005660394	Lax1
ENSMUSG0C 12.93100927	-1.8564334	0.576042733	-3.22273556	0.001269727	0.005671828	Has2os
ENSMUSG0C 333.1547798	-1.024414505	0.31787561	-3.222689855	0.00126993	0.005671828	Umad1
ENSMUSG0C 26.89540384	-2.443836696	0.758540399	-3.221762084	0.001274049	0.005688086	Alpl2
ENSMUSG0C 95.63410667	-1.941064242	0.602602185	-3.221137081	0.001276831	0.005697293	NA
ENSMUSG0C 42.00593917	-1.42315917	0.441866143	-3.220792523	0.001278367	0.005702005	Tro
ENSMUSG0C 1013.488077	-1.006665691	0.312645958	-3.219826338	0.001282683	0.005716963	Arap2
ENSMUSG0C 73.46020549	-1.953838991	0.60682837	-3.219755514	0.001283	0.005717303	Wnt2b
ENSMUSG0C 3.679302333	-2.761403029	0.857874157	-3.218890563	0.001286876	0.005732425	Plcx3
ENSMUSG0C 2442.945871	-0.862703881	0.268024021	-3.218755831	0.001287481	0.005734044	Rnf44
ENSMUSG0C 19.68871657	-1.502734425	0.466941248	-3.218251612	0.001289746	0.005740905	Zfp708
ENSMUSG0C 21.68216515	-1.624544412	0.504918207	-3.217440745	0.001293397	0.005755001	NA
ENSMUSG0C 724.0963352	-0.963864096	0.299598146	-3.217189783	0.001294529	0.005758959	Zbtb43
ENSMUSG0C 60.27866878	-2.433206288	0.756441893	-3.216646661	0.001296982	0.005766631	NA
ENSMUSG0C 4638.361423	-1.518719026	0.472165874	-3.216494691	0.001297669	0.005768606	Cldn15
ENSMUSG0C 1478.02706	-0.842166105	0.261863798	-3.21604632	0.001299699	0.005774788	Tuft1
ENSMUSG0C 75.25242909	-0.929578965	0.289048429	-3.215997292	0.001299921	0.005774788	Sobp
ENSMUSG0C 2215.168649	-0.648753291	0.20183387	-3.21429348	0.001307659	0.005805412	Ppm1b
ENSMUSG0C 1926.160812	-0.63887144	0.19879279	-3.213755596	0.001310111	0.00581521	Gabarapl2
ENSMUSG0C 7029.757028	-0.912006909	0.28380307	-3.213520242	0.001311186	0.005817782	Fam234a
ENSMUSG0C 20.7254676	-1.681216238	0.523178195	-3.213467712	0.001311425	0.005817782	NA
ENSMUSG0C 39.48931801	-1.206136801	0.375395727	-3.212974238	0.001313681	0.005825611	lqsec3
ENSMUSG0C 16.24766759	-2.386183668	0.742668778	-3.212985034	0.001313631	0.005825611	NA
ENSMUSG0C 8997.918508	-1.22030473	0.379831505	-3.212752795	0.001314694	0.00582833	Aldh1a1
ENSMUSG0C 439.7756196	-0.645761157	0.201077295	-3.211507077	0.001320407	0.005852163	Leng1
ENSMUSG0C 8.02028226	-1.819122138	0.566643076	-3.210349183	0.001325738	0.005874694	Mrap2
ENSMUSG0C 1338.841223	-0.862351339	0.26871665	-3.209147398	0.001331292	0.005898206	Yif1a
ENSMUSG0C 83.91803503	-2.286831169	0.712937147	-3.207619606	0.001338384	0.005926726	Kmo
ENSMUSG0C 4.111669166	-3.11462336	0.971107164	-3.207291097	0.001339913	0.005931976	Zp1
ENSMUSG0C 83.07179807	-1.545576142	0.481924332	-3.207092981	0.001340837	0.005934957	NA
ENSMUSG0C 4.642553597	-2.751110729	0.8579089	-3.206763246	0.001342374	0.005940656	NA
ENSMUSG0C 39.56555659	-2.368735616	0.738895446	-3.205779153	0.001346973	0.005957679	Cdhr1
ENSMUSG0C 62.58582389	-0.818673631	0.255406813	-3.205371149	0.001348884	0.005965021	NA
ENSMUSG0C 40.96171478	-1.384581493	0.432087569	-3.204400199	0.001353442	0.005982949	Efhh
ENSMUSG0C 246.15353	-1.174468255	0.366622585	-3.203480372	0.001357773	0.00599763	Chic1
ENSMUSG0C 4334.409204	-0.842463687	0.263131422	-3.201684082	0.001366267	0.006031788	Edf1
ENSMUSG0C 670.8859807	-0.832749579	0.260112925	-3.2014925	0.001367176	0.006034679	Tbce
ENSMUSG0C 27015.79688	-2.321893469	0.725463953	-3.200563528	0.001371591	0.006050793	Ces2e
ENSMUSG0C 2.73647471	-3.168837913	0.990389611	-3.19958719	0.001376246	0.006066231	Lrnf2
ENSMUSG0C 1.905811776	-3.29119471	1.028639247	-3.199561673	0.001376367	0.006066231	NA
ENSMUSG0C 2955.558514	-1.599169052	0.499902144	-3.198964177	0.001379223	0.006073183	Lypla1
ENSMUSG0C 52.1790677	-2.950868861	0.923148765	-3.196525817	0.001390934	0.006120212	NA
ENSMUSG0C 1701.02317	-1.114223132	0.348672736	-3.195613015	0.001395341	0.006137429	Pip5k1b
ENSMUSG0C 5.106531853	-2.787570972	0.872327643	-3.195555012	0.001395622	0.006137429	NA
ENSMUSG0C 4.267885573	-2.826571483	0.88461101	-3.19527052	0.001396998	0.006141209	NA
ENSMUSG0C 2.137040505	-3.344574428	1.047213155	-3.193785728	0.001404203	0.006168315	Vmn1r91



ENSMUSG0C 33.62176297	-2.077797933	0.650719916	-3.193075672	0.001407661	0.006181217	Hcar1
ENSMUSG0C 12.34229096	-1.525641167	0.477831442	-3.192843821	0.001408791	0.006185039	NA
ENSMUSG0C 87.42556392	-0.842141968	0.263769448	-3.192719916	0.001409396	0.00618655	Cysltr1
ENSMUSG0C 77.03620292	-1.455786175	0.456051621	-3.192152175	0.001412169	0.006197578	9530053A07Rik
ENSMUSG0C 122.4559032	-2.209867972	0.692304877	-3.192044496	0.001412696	0.006198744	Mfsd4b3
ENSMUSG0C 1195.78015	-0.996268227	0.312126687	-3.191871345	0.001413543	0.006200656	Plpp5
ENSMUSG0C 31.12228485	-1.44976273	0.454207849	-3.191848698	0.001413654	0.006200656	Rims4
ENSMUSG0C 100.4669905	-0.740713338	0.232240551	-3.189422921	0.001425572	0.006248317	Sez6l2
ENSMUSG0C 36.06806044	-2.173588403	0.681543535	-3.18921432	0.001426601	0.006251674	Tnfsf15
ENSMUSG0C 954.9212482	-0.567091954	0.177875395	-3.188141641	0.001431904	0.006272599	Lrch3
ENSMUSG0C 2366.761267	-1.656474288	0.519667083	-3.187568241	0.001434746	0.006279219	Tmem86a
ENSMUSG0C 2907.011969	-2.440875225	0.766233287	-3.185551013	0.001444786	0.006320874	Slc6a20a
ENSMUSG0C 3519.748241	-0.439735086	0.138060704	-3.185085068	0.001447115	0.006329894	Sel1l
ENSMUSG0C 243.4271303	-0.582156504	0.18278463	-3.184931371	0.001447883	0.006332091	Zfp597
ENSMUSG0C 2.561488008	-3.136390223	0.984828187	-3.184708018	0.001449001	0.006333482	Ckmt2
ENSMUSG0C 19.91995428	-1.90390451	0.597811668	-3.184789811	0.001448592	0.006333482	Cxcr3
ENSMUSG0C 1432.565124	-1.920952646	0.603237217	-3.184406716	0.001450511	0.006338912	Glod5
ENSMUSG0C 354.9882101	-0.772726826	0.2427229	-3.183576103	0.001454679	0.006355959	Ccdc28a
ENSMUSG0C 1862.352845	-0.574985866	0.180617406	-3.183446597	0.00145533	0.006357633	Cflar
ENSMUSG0C 22.30711935	-1.876163919	0.589686645	-3.181628642	0.001464495	0.006394144	NA
ENSMUSG0C 41.97994159	-0.984114531	0.309320878	-3.181532839	0.001464979	0.006395083	4921531C22Rik
ENSMUSG0C 111.428543	-1.885137541	0.592619118	-3.181027216	0.001467538	0.006405079	Tlr12
ENSMUSG0C 15.49273862	-1.953000419	0.614001502	-3.180774661	0.001468818	0.00640831	Kcnj3
ENSMUSG0C 139.4227806	-1.605602774	0.504775813	-3.180823511	0.001468571	0.00640831	Slc2a13
ENSMUSG0C 35.09453194	-1.245801804	0.391798354	-3.179701472	0.001474268	0.006429727	NA
ENSMUSG0C 656.7075778	-0.804977668	0.253194726	-3.179282925	0.001476399	0.006437837	Ccdc82
ENSMUSG0C 4262.181618	-2.137750691	0.672456829	-3.179015514	0.001477762	0.006442597	Nt5e
ENSMUSG0C 7.094225147	-1.788157543	0.562618335	-3.178278119	0.001481526	0.006456164	NA
ENSMUSG0C 2665.019901	-0.607651805	0.191255239	-3.177177304	0.001487161	0.006478818	Mgat1
ENSMUSG0C 6.831196229	-2.403062682	0.756469823	-3.176680165	0.001489712	0.006487554	NA
ENSMUSG0C 572.514603	-1.060497456	0.333976226	-3.175368104	0.001496465	0.00651338	Svip
ENSMUSG0C 4902.300116	-2.570945387	0.809825856	-3.174689185	0.001499971	0.006527442	2010106E10Rik
ENSMUSG0C 14940.77514	-1.699229653	0.535721972	-3.171849845	0.001514713	0.006584359	Emp1
ENSMUSG0C 478.3644269	-0.879608124	0.277388386	-3.171034437	0.001518971	0.006600454	Tmtc2
ENSMUSG0C 49.58029417	-1.079604779	0.340533524	-3.17033332	0.001522642	0.006615193	Runx1t1
ENSMUSG0C 2770.985425	-2.381579606	0.751256579	-3.17012812	0.001523717	0.006617446	Slc26a3
ENSMUSG0C 126.5923506	-2.229746238	0.70342765	-3.169830242	0.00152528	0.006623023	Rnf180
ENSMUSG0C 298.0192919	-2.148141274	0.677847561	-3.169062484	0.001529315	0.006639329	Eci3
ENSMUSG0C 17.40368624	-1.257011072	0.396800641	-3.167865524	0.001535625	0.006663071	Gm6329
ENSMUSG0C 2298.696129	-0.629104516	0.198663909	-3.166677421	0.001541913	0.00668913	Golga2
ENSMUSG0C 12.22675327	-1.466568619	0.463165409	-3.166403599	0.001543365	0.006694208	NA
ENSMUSG0C 1630.577911	-1.010849567	0.319265524	-3.166172008	0.001544594	0.006695873	Gpatch8
ENSMUSG0C 221.0693318	-1.722597017	0.544317285	-3.164692847	0.001552467	0.00672452	Tmem92
ENSMUSG0C 5.908482663	-2.709343316	0.856182109	-3.164447477	0.001553777	0.006727087	4930554H23Rik
ENSMUSG0C 455.8602861	-0.685829933	0.216765627	-3.163923826	0.001556575	0.006737974	Zfp943
ENSMUSG0C 2805.831889	-0.935325585	0.295780076	-3.162233234	0.001556564	0.006767353	Vps54
ENSMUSG0C 14.42643985	-1.402630141	0.443743038	-3.160906244	0.001572791	0.006795785	Adrb1
ENSMUSG0C 195.5491963	-1.192455387	0.377343238	-3.160134506	0.001576963	0.006808858	9930012K11Rik
ENSMUSG0C 6488.860031	-0.821527768	0.259994072	-3.159794234	0.001578806	0.006815576	Uqcrc2
ENSMUSG0C 595.159399	-1.003536825	0.317655477	-3.159198869	0.001582035	0.006827609	Nkd2
ENSMUSG0C 4360.598189	-0.670672574	0.212293625	-3.159174349	0.001582168	0.006827609	Amfr
ENSMUSG0C 351.3752993	-0.931149722	0.294785025	-3.158741604	0.001584519	0.006833444	Pigg
ENSMUSG0C 6.383955071	-2.629416387	0.832497397	-3.158467998	0.001586007	0.006836724	Slc7a10
ENSMUSG0C 2623.84664	-0.422477369	0.133758375	-3.15851153	0.00158577	0.006836724	Aftph
ENSMUSG0C 52.31183284	-1.809284852	0.57306126	-3.157227644	0.001592769	0.006864628	H2-M2
ENSMUSG0C 225.8295212	-1.330289275	0.421515469	-3.155967865	0.001599665	0.006893096	Glt28d2
ENSMUSG0C 1586.204974	-0.802087162	0.25420815	-3.155237788	0.001603673	0.006906611	Usp25
ENSMUSG0C 5700.962937	-1.633682712	0.518876281	-3.148501427	0.001641099	0.007053728	Fos
ENSMUSG0C 20.73254203	-2.140496373	0.679991127	-3.14782986	0.001644874	0.007068674	Gm3279
ENSMUSG0C 4012.003823	-0.87813427	0.279224944	-3.144899089	0.001661441	0.007132128	Pmm2
ENSMUSG0C 5006.468569	-0.597132403	0.189870423	-3.144946927	0.00166117	0.007132128	Ist1
ENSMUSG0C 658.8880714	-0.790290837	0.251339484	-3.144316304	0.001664754	0.007145058	Isc1
ENSMUSG0C 71.77490259	-1.009687868	0.321148761	-3.143988051	0.001666622	0.007150494	Arl10
ENSMUSG0C 1704.128446	-1.224342135	0.389456197	-3.143722306	0.001668137	0.007154406	Lama3
ENSMUSG0C 332.8668825	-0.631628161	0.200962402	-3.143016572	0.001672164	0.007170383	Parp16
ENSMUSG0C 383.2855207	-2.364355919	0.752291704	-3.142871185	0.001672994	0.007172651	Gm2061
ENSMUSG0C 3686.173954	-0.995324096	0.316935311	-3.14046451	0.001686801	0.007227724	Tmem183a

ENSMUSG0C 1522.810454	-1.224457468	0.389998976	-3.139642773	0.00169154	0.007243009	Fbxo34
ENSMUSG0C 29.3421734	-1.565447699	0.498757815	-3.138693072	0.001697031	0.007263904	Ccl17
ENSMUSG0C 3.786415113	-2.780911737	0.886368221	-3.137422656	0.001704402	0.007291515	Il23r
ENSMUSG0C 1123.009893	-0.592492338	0.188853461	-3.137312565	0.001705043	0.00729294	Rnf123
ENSMUSG0C 449.0686124	-0.80959114	0.258079756	-3.136980409	0.001706975	0.007299893	NA
ENSMUSG0C 1149.186976	-0.604531477	0.192722497	-3.13679766	0.00170804	0.00730313	2310035C23Rik
ENSMUSG0C 6.364738833	-2.451933963	0.781969417	-3.135588055	0.001715099	0.007329358	NA
ENSMUSG0C 2645.770317	-2.209712157	0.704996923	-3.134357167	0.001722311	0.007358111	Chp2
ENSMUSG0C 22.28065525	-2.233635807	0.713095499	-3.132309503	0.001734369	0.007398398	NA
ENSMUSG0C 18.80240947	-1.354172811	0.432379313	-3.131909348	0.001736735	0.007405829	NA
ENSMUSG0C 35.66146665	-0.961964585	0.307252639	-3.130858657	0.00174296	0.00742968	Ing4
ENSMUSG0C 74.48875993	-1.002693063	0.320256495	-3.130906251	0.001742678	0.00742968	NA
ENSMUSG0C 1159.740387	-0.620066462	0.198074322	-3.130473735	0.001745246	0.007436783	Prune1
ENSMUSG0C 54.6552995	-1.373681143	0.438995369	-3.129147231	0.001753144	0.007465555	Cys1
ENSMUSG0C 2.082587858	-3.300841771	1.054875702	-3.129128641	0.001753255	0.007465555	NA
ENSMUSG0C 95.39354744	-1.10136389	0.352206114	-3.127043641	0.001765737	0.007513318	NA
ENSMUSG0C 11.82448697	-1.971131955	0.630414038	-3.126725988	0.001767646	0.007520093	Tmc1
ENSMUSG0C 979.5945351	-0.497878089	0.159245776	-3.126475954	0.00176915	0.007525142	Smarca2
ENSMUSG0C 1078.125688	-0.991702873	0.317203625	-3.126391995	0.001769655	0.007525944	Sos2
ENSMUSG0C 629.4437645	-1.239271957	0.396430549	-3.126075831	0.001771559	0.007532691	Hipk2
ENSMUSG0C 2076.040565	-1.389940545	0.444804666	-3.124833554	0.001779057	0.007560515	Tmem41a
ENSMUSG0C 2574.583013	-0.705343135	0.225731776	-3.124695807	0.00177989	0.007562703	Stag2
ENSMUSG0C 22.22592557	-1.695599287	0.54284885	-3.123520087	0.001787017	0.007586199	Ppp4r4
ENSMUSG0C 6.45438719	-1.951069264	0.624706048	-3.123179724	0.001789085	0.007593621	Car10
ENSMUSG0C 1220.176561	-1.504507068	0.481735323	-3.123098922	0.001789576	0.007594349	Hsd17b13
ENSMUSG0C 20.09973412	-1.167514501	0.373902248	-3.122512652	0.001793144	0.007605415	NA
ENSMUSG0C 338.5368054	-0.817273782	0.261743066	-3.122427637	0.001793662	0.007606254	Stambpl1
ENSMUSG0C 4438.480988	-1.146378402	0.367201985	-3.121928665	0.001796705	0.007616438	AU040320
ENSMUSG0C 4555.10529	-0.604108871	0.193509179	-3.121861576	0.001797114	0.007616814	Map4
ENSMUSG0C 24.25665885	-1.009393289	0.323344907	-3.121723168	0.001797959	0.007619036	NA
ENSMUSG0C 29588.96009	-1.764102639	0.565817709	-3.117793261	0.001822106	0.007713105	Acs15
ENSMUSG0C 831.280766	-0.889415143	0.285287611	-3.117608714	0.001823247	0.007715186	Slc35b3
ENSMUSG0C 35.40710922	-2.3401924	0.750636663	-3.117610043	0.001823239	0.007715186	NA
ENSMUSG0C 24.86440757	-1.162485855	0.3729339	-3.117136456	0.00182617	0.00772618	NA
ENSMUSG0C 853.3963164	-1.045601716	0.335464872	-3.116873938	0.001827797	0.007731686	Aamdc
ENSMUSG0C 13885.18518	-1.596650863	0.512302372	-3.116618135	0.001829384	0.00773702	Hsd17b11
ENSMUSG0C 1342.583867	-0.836383199	0.268379896	-3.116415238	0.001830643	0.007740967	Gim1
ENSMUSG0C 1373.063524	-1.991444463	0.639291562	-3.115080162	0.001838949	0.007771941	2010003K11Rik
ENSMUSG0C 441.1562949	-1.702525693	0.546889232	-3.113108821	0.001851277	0.007818539	Tmem139
ENSMUSG0C 59.89055365	-2.247789748	0.722164517	-3.112572959	0.001854642	0.007829904	Ces1c
ENSMUSG0C 2902.224187	-0.569280002	0.182932679	-3.111964497	0.001858468	0.007844665	Gmfb
ENSMUSG0C 109.5553528	-0.810635077	0.26053596	-3.111413402	0.001861941	0.00785653	Zfp526
ENSMUSG0C 1.967513492	-3.266030204	1.049848297	-3.110954423	0.001864837	0.007867354	NA
ENSMUSG0C 2443.142969	-0.682666245	0.219524975	-3.10974296	0.001872502	0.007890262	Rab5b
ENSMUSG0C 417.0532608	-2.265451568	0.729008106	-3.107580768	0.001886254	0.00794501	Ces1g
ENSMUSG0C 2.483533635	-3.069380488	0.987776193	-3.10736431	0.001887636	0.007949421	1700081H04Rik
ENSMUSG0C 15.85195984	-1.469941511	0.47320164	-3.106374503	0.001893967	0.007971842	Oprd1
ENSMUSG0C 3161.940736	-0.95386815	0.307098133	-3.10606952	0.001895921	0.007975829	Pcdh1
ENSMUSG0C 15.76391597	-1.861357242	0.599244848	-3.106171457	0.001895268	0.007975829	NA
ENSMUSG0C 4263.386275	-0.760988964	0.245125412	-3.104488258	0.001906085	0.00801291	Ugp2
ENSMUSG0C 4.656834776	-2.497250167	0.804389763	-3.104527534	0.001905832	0.00801291	NA
ENSMUSG0C 50.18847508	-1.716218765	0.552905109	-3.104002365	0.001909218	0.008023241	Clec1b
ENSMUSG0C 867.7955022	-1.256879313	0.40500642	-3.103356519	0.00191339	0.008037929	Pag1
ENSMUSG0C 32251.82265	-1.37467425	0.443029772	-3.102893615	0.001916385	0.008047666	Mt1
ENSMUSG0C 3367.070058	-1.105091637	0.356200643	-3.102441442	0.001919315	0.008057122	Btg2
ENSMUSG0C 73.21216288	-1.632385037	0.526343975	-3.101365481	0.001926304	0.00808387	Trpc3
ENSMUSG0C 1703.355642	-0.572979267	0.184761931	-3.101176007	0.001927537	0.00808592	Zc3h4
ENSMUSG0C 740.8713612	-1.204190219	0.388530018	-3.099349244	0.001939463	0.008130205	Heca
ENSMUSG0C 196.8270215	-0.886566545	0.286083003	-3.098983639	0.001941857	0.008137373	Lrrc56
ENSMUSG0C 19.88481761	-1.633248756	0.527336435	-3.097166529	0.001953801	0.008184534	Nefm
ENSMUSG0C 619.7467339	-0.746429539	0.241047392	-3.096609062	0.001957478	0.00819416	Zfp946
ENSMUSG0C 3.507829909	-2.42611204	0.783612761	-3.096059889	0.001961107	0.008204109	Gpr158
ENSMUSG0C 61.17416408	-1.506698618	0.486665291	-3.095964818	0.001961736	0.008204755	Cd3e
ENSMUSG0C 1120.129235	-0.632155752	0.204257892	-3.094890224	0.001968858	0.008233089	Mcoln1
ENSMUSG0C 4.668540341	-2.292187973	0.740678543	-3.094713616	0.00197003	0.008236543	Gm9899
ENSMUSG0C 188.3861142	-1.577538831	0.51002665	-3.093051765	0.001981096	0.008275525	Gimap8
ENSMUSG0C 25.610729	-1.171965955	0.378909225	-3.092999265	0.001981446	0.008275534	Lix1

ENSMUSG0C 54.48455785	-1.573978512	0.509161677	-3.091313785	0.001992729	0.008315348	Sh2d2a
ENSMUSG0C 558.4251747	-0.575865363	0.186348453	-3.090261033	0.001999807	0.008339021	Clec16a
ENSMUSG0C 3.642577597	-3.428629558	1.110413254	-3.087705902	0.00201708	0.008408098	Defb6
ENSMUSG0C 3.516503642	-2.675323903	0.866604712	-3.087132883	0.002020972	0.008421368	Sbpl
ENSMUSG0C 1588.703617	-2.046986471	0.663087724	-3.08705228	0.00202152	0.008422174	NA
ENSMUSG0C 200.8733503	-1.214098635	0.393594205	-3.084645607	0.002037948	0.008483178	1700019D03Rik
ENSMUSG0C 3.439438111	-2.938124036	0.952595575	-3.084335171	0.002040076	0.008490548	Fam196b
ENSMUSG0C 2565.905347	-1.043665398	0.338418081	-3.083952829	0.0020427	0.00849849	Crot
ENSMUSG0C 1451.238409	-0.456777098	0.148121253	-3.083805255	0.002043713	0.008501217	Mfn1
ENSMUSG0C 7247.379953	-1.351260906	0.43821934	-3.083526404	0.00204563	0.008507699	H2-Eb1
ENSMUSG0C 10.5529735	-1.645534292	0.533711305	-3.083191749	0.002047932	0.008515782	Efcc1
ENSMUSG0C 449.884261	-2.177886005	0.706483636	-3.0827126	0.002051232	0.008526519	Card9
ENSMUSG0C 5.520546892	-2.647073712	0.858716668	-3.082592676	0.002052058	0.008528463	NA
ENSMUSG0C 1331.395439	-0.779573202	0.252925634	-3.082222978	0.002054609	0.008537569	Abhd16a
ENSMUSG0C 1451.91908	-2.477498442	0.804217487	-3.080632395	0.002065615	0.008580302	Slc47a1
ENSMUSG0C 10.90503483	-1.682517862	0.546421226	-3.079159046	0.002075858	0.008616825	Scn2a
ENSMUSG0C 160.3149734	-1.343057269	0.437397767	-3.070562698	0.002136558	0.008844063	Wfdc1
ENSMUSG0C 2.3129507	-3.298762114	1.074466706	-3.070138976	0.002139592	0.008853535	NA
ENSMUSG0C 4.347831759	-2.677293682	0.872569719	-3.068286263	0.002152903	0.008902412	NA
ENSMUSG0C 12.74386538	-1.508716625	0.491758974	-3.068000189	0.002154965	0.008907838	Ppfia2
ENSMUSG0C 27.41383626	-1.267001453	0.413203039	-3.066292676	0.002167311	0.008954196	NA
ENSMUSG0C 668.0753577	-0.705051303	0.23003881	-3.064923275	0.002177258	0.008988782	Hivep2
ENSMUSG0C 70.07905458	-1.173989973	0.383045987	-3.064879973	0.002177574	0.008988782	Dmtn
ENSMUSG0C 6.552257044	-2.151371939	0.701966419	-3.064779001	0.002178309	0.008990255	NA
ENSMUSG0C 848.1453708	-1.239279206	0.404424381	-3.064303895	0.002181772	0.008999855	Arl5b
ENSMUSG0C 920.3459351	-0.751982448	0.245429726	-3.063942008	0.002184412	0.009009185	Phf2
ENSMUSG0C 68.47571193	-1.715860493	0.560204852	-3.06291616	0.002191915	0.00903542	Dpp6
ENSMUSG0C 6626.187256	-0.974933616	0.318352331	-3.062435926	0.002195435	0.00904679	Herpud1
ENSMUSG0C 157.2468644	-1.204072575	0.393172577	-3.062453097	0.002195309	0.00904679	Capn13
ENSMUSG0C 134.9091322	-2.163436998	0.706547012	-3.061985914	0.002198738	0.00905569	Irf4
ENSMUSG0C 20.67913138	-1.712964367	0.559828086	-3.059804268	0.002214817	0.009115591	4833427F10Rik
ENSMUSG0C 1283.300785	-1.317568626	0.430649808	-3.059489641	0.002217145	0.00912359	Rhof
ENSMUSG0C 2670.989275	-0.853525853	0.279033641	-3.058863613	0.002221783	0.00913951	Pnp0
ENSMUSG0C 2086.473155	-1.024020719	0.334852807	-3.058121947	0.002227289	0.009159881	Il10rb
ENSMUSG0C 1524.760828	-0.797367239	0.26078572	-3.057557132	0.002231491	0.009171505	Cpped1
ENSMUSG0C 24.90857827	-1.518402177	0.49662103	-3.05746653	0.002232166	0.009172691	Mmp16
ENSMUSG0C 1535.503426	-1.179647101	0.386221655	-3.054326672	0.002255663	0.009250049	Hist1h2bc
ENSMUSG0C 182.0006083	-1.421953436	0.465553008	-3.054331973	0.002255623	0.009250049	Hdgfrp3
ENSMUSG0C 983.7620047	-0.455955096	0.14928011	-3.054359334	0.002255418	0.009250049	Prdm2
ENSMUSG0C 2.310228465	-3.281132421	1.07461416	-3.053312103	0.002263304	0.00927818	NA
ENSMUSG0C 6.652220473	-3.19921334	1.048067377	-3.052488237	0.002269526	0.009302082	B930025P03Rik
ENSMUSG0C 390.9739091	-1.369200006	0.448753015	-3.051121576	0.002279882	0.009339694	Mapk4
ENSMUSG0C 14566.00247	-1.137809986	0.372948219	-3.050852447	0.002281927	0.009344846	Abhd2
ENSMUSG0C 81.03529694	-1.681101467	0.55106139	-3.050660956	0.002283383	0.009349196	Flrt2
ENSMUSG0C 251.0021692	-0.76703508	0.251481406	-3.05006677	0.002287905	0.009366099	Slc26a11
ENSMUSG0C 3.612485026	-3.21455316	1.054257138	-3.049116809	0.002295152	0.009389295	Syce1
ENSMUSG0C 2033.623603	-2.165890333	0.710321859	-3.049167506	0.002294765	0.009389295	Slc39a5
ENSMUSG0C 7.812809055	-1.71657911	0.563015514	-3.048901971	0.002296794	0.009394394	Pcdhga11
ENSMUSG0C 2828.485862	-1.326350676	0.435123661	-3.048215475	0.002302048	0.009412642	Sec24d
ENSMUSG0C 2950.770339	-1.063743799	0.348996295	-3.048008857	0.002303631	0.009417496	Baiap2l1
ENSMUSG0C 31.59166479	-1.816080629	0.596087187	-3.046669462	0.00231392	0.009451425	BC024139
ENSMUSG0C 1439.033482	-1.394946753	0.457891335	-3.046458068	0.002315548	0.009454822	Parp3
ENSMUSG0C 2177.455323	-0.879079736	0.288555519	-3.046483873	0.002315349	0.009454822	Palld
ENSMUSG0C 3.282289693	-2.637977608	0.865965269	-3.046285691	0.002316876	0.009458619	Stxbp5l
ENSMUSG0C 1568.227143	-1.545952921	0.507697605	-3.045027013	0.002326594	0.009491769	Fam3b
ENSMUSG0C 2662.604333	-0.620557838	0.203845047	-3.044262526	0.002332515	0.009512657	Fblim1
ENSMUSG0C 178.9128238	-0.955961445	0.314047759	-3.044000211	0.00233455	0.009519321	Hic2
ENSMUSG0C 135.6598261	-0.834716471	0.27427321	-3.043375874	0.002339399	0.009535822	NA
ENSMUSG0C 7.508891371	-2.067060079	0.679225732	-3.043259381	0.002340305	0.009537878	NA
ENSMUSG0C 61.68193908	-1.364216868	0.448388904	-3.042485792	0.002346329	0.009557509	Hoxc4
ENSMUSG0C 5127.324074	-1.195887152	0.3930845	-3.042315718	0.002347655	0.009561271	Atp2a3
ENSMUSG0C 1415.361866	-1.100471868	0.36176553	-3.04194783	0.002350526	0.009569683	Inpp5b
ENSMUSG0C 663.2208931	-0.594903727	0.195576041	-3.041802684	0.00235166	0.009572658	Ndst2
ENSMUSG0C 9.323817743	-1.91943827	0.631331635	-3.040301107	0.002363417	0.009613928	NA
ENSMUSG0C 1022.238081	-0.571445251	0.188017248	-3.039323554	0.002371101	0.009643531	Ttpal
ENSMUSG0C 530.4680916	-0.652587316	0.214726994	-3.039148937	0.002372475	0.009645858	Idnk
ENSMUSG0C 7589.100967	-0.634293769	0.20871726	-3.039009655	0.002373572	0.009648629	Kif1c

ENSMUSG0C 2.429968011	-3.034615668	0.998682623	-3.038618675	0.002376655	0.009659506	Fbl11
ENSMUSG0C 360.0537326	-1.029891862	0.338967322	-3.038321973	0.002378996	0.009667108	Eif4e3
ENSMUSG0C 3.197387769	-2.609957566	0.859131202	-3.037903361	0.002382303	0.009674188	NA
ENSMUSG0C 16.0298328	-2.240132273	0.737649179	-3.036853205	0.002390618	0.009699102	Defb1
ENSMUSG0C 8.478518815	-1.824391997	0.600738556	-3.03691511	0.002390128	0.009699102	Foxd3
ENSMUSG0C 1.860358294	-3.196315564	1.052569893	-3.03667774	0.00239201	0.009700341	Klri1
ENSMUSG0C 1650.231933	-1.003493063	0.330532645	-3.035987758	0.002397491	0.009719248	Slc22a18
ENSMUSG0C 30.67151575	-3.402804188	1.120871092	-3.035856854	0.002398532	0.00972181	NA
ENSMUSG0C 1633.657898	-0.493978339	0.162757469	-3.035057874	0.002404895	0.009739293	Smap2
ENSMUSG0C 17.10882279	-2.332824415	0.769028176	-3.033470667	0.002417582	0.009784461	Tespa1
ENSMUSG0C 25.66396418	-1.979699247	0.652669207	-3.033235252	0.002419469	0.009784969	Bnc1
ENSMUSG0C 4985.27752	-0.752359724	0.248033132	-3.03330332	0.002418923	0.009784969	Src
ENSMUSG0C 8491.041119	-0.975912796	0.321732288	-3.033306983	0.002418894	0.009784969	Lmo7
ENSMUSG0C 608.7837277	-0.844058295	0.278269472	-3.033240724	0.002419425	0.009784969	Osbpl5
ENSMUSG0C 38.77486324	-1.114016738	0.367350798	-3.03256926	0.002424814	0.009801581	Egf
ENSMUSG0C 18.30258217	-1.657394354	0.546619582	-3.032080093	0.002428748	0.009815809	Mfsd13b
ENSMUSG0C 575.6121359	-0.737906177	0.243413971	-3.031486547	0.002433528	0.009831783	Kat6b
ENSMUSG0C 18061.59934	-0.780048124	0.257341593	-3.031177802	0.002436018	0.009840169	Slc25a3
ENSMUSG0C 1278.275783	-0.825233109	0.27228631	-3.030755054	0.002439431	0.00985228	Fam76a
ENSMUSG0C 160.6891025	-2.536109364	0.83689182	-3.03039091	0.002442374	0.009862491	Krt84
ENSMUSG0C 1479.103373	-0.738376004	0.243794736	-3.028679027	0.002456255	0.009915173	Zyg11b
ENSMUSG0C 20.15559381	-1.26073663	0.416292113	-3.028490311	0.00245779	0.009918179	Ttbk1
ENSMUSG0C 993.7955247	-1.431883739	0.473043623	-3.026959186	0.002470273	0.009959913	Sema6d
ENSMUSG0C 615.9760855	-0.714911684	0.236401352	-3.024143806	0.002493379	0.010042846	Dnajb4
ENSMUSG0C 26.34859071	-2.210362004	0.730959805	-3.023917308	0.002495246	0.010046961	Plin1
ENSMUSG0C 18.30280872	-1.712398341	0.566497251	-3.022783144	0.002504617	0.010079565	Rarres1
ENSMUSG0C 1272.707547	-0.596913087	0.197593773	-3.020910416	0.002520159	0.010130101	Gab1
ENSMUSG0C 539.0010173	-1.493706148	0.494544674	-3.020366461	0.00252469	0.01014493	Syt7
ENSMUSG0C 52.92808972	-1.365396498	0.452063408	-3.020365005	0.002524702	0.01014493	4932438H23Rik
ENSMUSG0C 1618.006896	-0.800270821	0.265015119	-3.01971761	0.002530105	0.010164919	Igsf5
ENSMUSG0C 3103.45757	-0.689176836	0.228241009	-3.01951363	0.002531809	0.010170046	Acads
ENSMUSG0C 1151.888217	-0.500086345	0.165771913	-3.016713359	0.002555313	0.010254057	Ankrd46
ENSMUSG0C 860.9811949	-0.963247571	0.319324492	-3.016516416	0.002556974	0.010257256	Ptch1
ENSMUSG0C 415.7426219	-0.575627385	0.190836264	-3.016341718	0.002558448	0.010261435	Gpatch2l
ENSMUSG0C 1453.465399	-0.78255224	0.259515924	-3.015430524	0.002566147	0.010287776	Ezh1
ENSMUSG0C 756.9000701	-0.796331748	0.264079407	-3.015501116	0.00256555	0.010287776	Nln
ENSMUSG0C 1229.702751	-0.594127591	0.197047854	-3.015143671	0.002568576	0.010293367	Wdr13
ENSMUSG0C 3.350055234	-2.61962449	0.868820327	-3.015151016	0.002568513	0.010293367	NA
ENSMUSG0C 285.393561	-1.269315594	0.420991346	-3.015063388	0.002569256	0.010294356	Tnfaip8l2
ENSMUSG0C 28711.77012	-1.269990458	0.421270619	-3.014666583	0.002572619	0.010302619	Cd74
ENSMUSG0C 6153.79693	-0.452722796	0.150223375	-3.013664125	0.002581134	0.010331494	Ncstn
ENSMUSG0C 133.3267013	-1.494895128	0.496031267	-3.013711487	0.002580731	0.010331494	Tcf21
ENSMUSG0C 2.701949035	-2.766168092	0.918176337	-3.012676301	0.00258955	0.010358199	Fbxw24
ENSMUSG0C 178.921807	-0.956622831	0.317551444	-3.012497186	0.002591078	0.010362569	Tmod2
ENSMUSG0C 61.854656	-1.674060472	0.555791507	-3.012029605	0.002595073	0.01037378	Kcnj10
ENSMUSG0C 600.3278559	-0.830541817	0.275770798	-3.011710538	0.002597802	0.010382466	Elmod3
ENSMUSG0C 36.83767159	-1.112107465	0.369440616	-3.010246893	0.002610354	0.010425617	Caskin1
ENSMUSG0C 47.41172777	-1.613036801	0.535919321	-3.009850059	0.002613767	0.010437493	Zfp759
ENSMUSG0C 2493.745563	-0.682385181	0.226754716	-3.009353872	0.00261804	0.010451043	Ndfip1
ENSMUSG0C 23.94949788	-1.583664913	0.526838979	-3.005975215	0.002647306	0.010557226	NA
ENSMUSG0C 2257.122967	-0.620803246	0.206559775	-3.005441143	0.002651959	0.010572234	Vti1b
ENSMUSG0C 3542.681867	-0.576898097	0.191998386	-3.004702845	0.002658404	0.010594236	Mast2
ENSMUSG0C 1344.07535	-1.145065838	0.381095126	-3.004671956	0.002658674	0.010594236	Fam160b1
ENSMUSG0C 9651.877477	-2.100036013	0.699020033	-3.004257266	0.002662301	0.010606343	Maoa
ENSMUSG0C 1098.93242	-0.961341512	0.320019451	-3.004009629	0.002664469	0.010611421	Rasa2
ENSMUSG0C 87.0585394	-0.951763502	0.316854361	-3.003788553	0.002666406	0.010616687	NA
ENSMUSG0C 8.784030004	-2.008947292	0.669096231	-3.002478866	0.002677906	0.010657786	NA
ENSMUSG0C 16.9956004	-2.241745148	0.746652462	-3.002394371	0.002678649	0.01065896	Ffar3
ENSMUSG0C 3880.734685	-1.143152749	0.380780488	-3.002130586	0.002680971	0.010664628	Gdpd1
ENSMUSG0C 669.2181885	-0.803770583	0.267742764	-3.002025416	0.002681898	0.010666527	Rps6kc1
ENSMUSG0C 439.3304075	-0.677472642	0.225697864	-3.001679451	0.002684947	0.010675081	Inpp5e
ENSMUSG0C 44.82016449	-1.613837973	0.537673817	-3.001518618	0.002686366	0.010677148	Pla2g3
ENSMUSG0C 1198.90272	-0.695161585	0.231652591	-3.000879821	0.002692008	0.010694204	Pptc7
ENSMUSG0C 3324.099197	-1.143238866	0.381193666	-2.999102472	0.002707762	0.010753193	Stom
ENSMUSG0C 1124.75307	-0.916496985	0.305602412	-2.998984788	0.002708808	0.010755549	Cenpv
ENSMUSG0C 2613.838053	-0.856440757	0.285606588	-2.99867298	0.002711582	0.010759812	Cdk18
ENSMUSG0C 63.13461783	-1.211915999	0.404152465	-2.998660415	0.002711694	0.010759812	Gm11696



ENSMUSG0C 3943.44688	-0.638211031	0.212854329	-2.998346492	0.002714489	0.010767305	Larp4b
ENSMUSG0C 12.31890946	-1.834953427	0.612075359	-2.997920761	0.002718283	0.010780558	Acot5
ENSMUSG0C 430.8148038	-0.937582787	0.312854902	-2.996861419	0.002727747	0.010812674	Plekhn3
ENSMUSG0C 14.77569118	-1.377905861	0.460044107	-2.995160334	0.002743006	0.010867721	Catsper4
ENSMUSG0C 93.41537012	-1.90529809	0.636159857	-2.994998927	0.002744458	0.01087166	NA
ENSMUSG0C 76.92253035	-0.720121244	0.24051831	-2.994039174	0.002753106	0.010904099	NA
ENSMUSG0C 2795.355556	-0.494677847	0.165320051	-2.992243495	0.002769353	0.010961137	Zmiz2
ENSMUSG0C 1.674591403	-3.119111393	1.042433012	-2.992145641	0.002770241	0.010962724	NA
ENSMUSG0C 702.8630717	-0.509744533	0.170374959	-2.991898197	0.002772487	0.01096806	Flywch1
ENSMUSG0C 48366.19755	-1.818959976	0.608141416	-2.991014802	0.00278052	0.010994347	NA
ENSMUSG0C 297.1446473	-1.255023721	0.419686431	-2.990384319	0.002786266	0.011015235	9130230L23Rik
ENSMUSG0C 32.26944947	-1.18001743	0.394735733	-2.989385887	0.002795388	0.011045783	NA
ENSMUSG0C 783.3412842	-2.919203779	0.976727181	-2.988760664	0.002801115	0.011064728	Gimd1
ENSMUSG0C 2946.09847	-0.922025641	0.308535305	-2.988395898	0.00280446	0.011076103	Sel1l3
ENSMUSG0C 384.6045268	-1.181379662	0.395644866	-2.985959791	0.002826898	0.011155447	Jam2
ENSMUSG0C 3180.404072	-0.441950324	0.148013712	-2.985874211	0.002827689	0.011156716	Lpp
ENSMUSG0C 101.1056951	-1.012903835	0.339294739	-2.985321371	0.002832805	0.011171335	4930481A15Rik
ENSMUSG0C 1859.601301	-0.583248609	0.19537572	-2.985266582	0.002833313	0.011171482	Srf
ENSMUSG0C 21.61981242	-1.150446399	0.38545393	-2.984653447	0.002838998	0.011192039	NA
ENSMUSG0C 1873.286996	-0.628817594	0.21070525	-2.984347056	0.002841842	0.011201395	Nipa2
ENSMUSG0C 19.15355584	-1.619722182	0.542759898	-2.984233339	0.002842899	0.011201842	Gm16287
ENSMUSG0C 52.72390892	-1.448205504	0.485283738	-2.984244866	0.002842792	0.011201842	NA
ENSMUSG0C 461.7139864	-1.214517131	0.40711491	-2.983229307	0.002852242	0.011229344	Frat2
ENSMUSG0C 1533.910871	-1.576488787	0.528626873	-2.982233531	0.002861536	0.011264069	1810055G02Rik
ENSMUSG0C 790.1000246	-0.714710027	0.239787562	-2.980596745	0.002876874	0.011320578	Sap30l
ENSMUSG0C 3.033636049	-3.303924425	1.108588928	-2.980297152	0.002879689	0.011328016	Defa27
ENSMUSG0C 1458.707814	-1.051478259	0.352861831	-2.979858309	0.002883817	0.011340501	Oasl1
ENSMUSG0C 16.73189985	-1.995864707	0.669820854	-2.979699268	0.002885315	0.011344512	Adgre4
ENSMUSG0C 1501.637073	-1.293354455	0.434185017	-2.978809504	0.002893706	0.01137374	Epb41l1
ENSMUSG0C 1696.896609	-0.604192374	0.2029274	-2.977381925	0.002907216	0.011417204	Apaf1
ENSMUSG0C 7.867476597	-1.85276445	0.622470781	-2.976468144	0.002915894	0.01144769	Dscam
ENSMUSG0C 754.4775983	-0.704490918	0.236757099	-2.975585188	0.002924301	0.011471218	Sh2b3
ENSMUSG0C 14.23981291	-1.47714595	0.496480785	-2.97523287	0.002927662	0.011482506	NA
ENSMUSG0C 3464.103583	-1.421671562	0.477897185	-2.974848159	0.002931336	0.011493121	Pcyt1a
ENSMUSG0C 77.22938187	-1.380907327	0.464219818	-2.974684131	0.002932904	0.011497312	Plcl1
ENSMUSG0C 6.646664529	-2.457747788	0.826302303	-2.974393002	0.002935688	0.011504488	NA
ENSMUSG0C 3877.369126	-1.323745597	0.445099157	-2.974046512	0.002939005	0.011515588	Pgm1
ENSMUSG0C 5278.152796	-0.773119287	0.259975369	-2.973817448	0.0029412	0.01152063	Mtch2
ENSMUSG0C 1582.228329	-2.321271749	0.780582874	-2.973767201	0.002941682	0.01152063	Slc27a2
ENSMUSG0C 1093.245027	-0.465227957	0.156473955	-2.973197404	0.002947148	0.011537979	Rab21
ENSMUSG0C 33.96842982	-1.86347286	0.626812407	-2.972935506	0.002949664	0.011545926	NA
ENSMUSG0C 942.191386	-1.770842791	0.595755875	-2.972430261	0.002954523	0.01156304	H2-Q1
ENSMUSG0C 6812.077307	-2.262805425	0.761352918	-2.972084785	0.00295785	0.011574153	Spink1
ENSMUSG0C 6.445802936	-1.834621566	0.617470162	-2.971190641	0.002966476	0.011601892	Olf127l1
ENSMUSG0C 6.431728101	-2.995786272	1.008292673	-2.971147518	0.002966892	0.011601892	NA
ENSMUSG0C 4925.440561	-0.572621262	0.192737928	-2.970983806	0.002968474	0.011606168	Cers2
ENSMUSG0C 101.6884075	-1.144279018	0.385289089	-2.969923235	0.002978742	0.011634822	NA
ENSMUSG0C 56.20859748	-2.519884654	0.848591736	-2.969489977	0.002982945	0.011647412	NA
ENSMUSG0C 2482.507178	-1.078887531	0.363403945	-2.96883825	0.002989279	0.011668306	Gclm
ENSMUSG0C 1545.051691	-0.563979025	0.190015529	-2.968068075	0.00299678	0.011695662	Arhgef7
ENSMUSG0C 1.971290655	-3.162019886	1.065571323	-2.967440862	0.0030029	0.011717625	NA
ENSMUSG0C 9.515110187	-1.888881754	0.636772255	-2.966338028	0.003013691	0.011753937	NA
ENSMUSG0C 1897.715213	-0.808083835	0.272469872	-2.965773167	0.003019231	0.011772596	Ubr3
ENSMUSG0C 80.25425938	-1.143795227	0.385781512	-2.964878283	0.003028027	0.011802102	Adam22
ENSMUSG0C 1057.907646	-0.946401851	0.319262096	-2.964341411	0.003033315	0.011816898	B4galt4
ENSMUSG0C 7.517043353	-1.965812266	0.663194231	-2.96415767	0.003035127	0.011822017	Nap1l2
ENSMUSG0C 19.11223182	-1.215335911	0.410259147	-2.962361518	0.003052891	0.011881468	Olf1635
ENSMUSG0C 1033.972752	-1.094358937	0.369451708	-2.962116327	0.003055323	0.011888986	Acot11
ENSMUSG0C 1479.739206	-0.908512743	0.306729814	-2.961931643	0.003057156	0.011892224	Atrnl1
ENSMUSG0C 5.750345022	-1.941184418	0.655475243	-2.961491586	0.003061529	0.011905332	NA
ENSMUSG0C 1279.969224	-0.641417478	0.21665893	-2.960494078	0.00307146	0.011940044	Clpx
ENSMUSG0C 12.66998616	-1.857274956	0.628033832	-2.95728488	0.003103612	0.012053198	Wdr86
ENSMUSG0C 29.2677941	-1.954944381	0.661130525	-2.956971893	0.003106764	0.012063467	NA
ENSMUSG0C 7.491309875	-2.352761972	0.795910369	-2.956063977	0.003115925	0.012097059	Arx
ENSMUSG0C 99.46671406	-1.071333956	0.36252998	-2.955159618	0.003125073	0.012128613	NA
ENSMUSG0C 4499.807132	-1.800162781	0.609180524	-2.955056356	0.003126119	0.012130691	Cgref1
ENSMUSG0C 5795.4078	-0.585199678	0.198046508	-2.954859864	0.003128111	0.012136437	Tmbim1



ENSMUSG0C 20.16030597	-1.474757651	0.49915427	-2.954512745	0.003131632	0.012146131	Pm20d2
ENSMUSG0C 5.363520372	-2.434327412	0.824160468	-2.953705628	0.003139834	0.012171845	NA
ENSMUSG0C 16.48633242	-1.197486374	0.405424766	-2.953658664	0.003140311	0.012171845	NA
ENSMUSG0C 9321.252554	-1.293416623	0.438232952	-2.951436255	0.003162998	0.012249786	4931406C07Rik
ENSMUSG0C 868.2853668	-0.430514271	0.145888516	-2.950981221	0.003167662	0.012265847	Ate1
ENSMUSG0C 3424.598054	-0.853329473	0.289199805	-2.950657153	0.003170987	0.012276092	Vamp3
ENSMUSG0C 39.47359867	-1.264971261	0.428819606	-2.949891386	0.003178857	0.01230318	Itk
ENSMUSG0C 83.67683794	-0.897908837	0.304458856	-2.949195989	0.003186019	0.01232889	Rhbd13
ENSMUSG0C 86.53731627	-1.757049025	0.595789682	-2.949109522	0.00318691	0.012330332	D130043K22Rik
ENSMUSG0C 251.8819085	-2.065571338	0.700519445	-2.948628126	0.003191878	0.012345531	Hoxb7
ENSMUSG0C 10195.28282	-0.697961615	0.236798933	-2.947486322	0.003203689	0.01238315	Arpc2
ENSMUSG0C 10344.51348	-0.652336483	0.221465406	-2.945545737	0.003223855	0.012455404	Capzb
ENSMUSG0C 12.64672175	-1.63505293	0.555181727	-2.945076991	0.003228743	0.012467819	NA
ENSMUSG0C 5.331559672	-2.097066323	0.71213147	-2.944774122	0.003231905	0.012478001	Ceacam3
ENSMUSG0C 17.51766201	-1.726299216	0.58627628	-2.944514856	0.003234614	0.012486431	Ccdc96
ENSMUSG0C 42.12371517	-1.246103991	0.423217446	-2.944358748	0.003236246	0.012490702	Tmem132e
ENSMUSG0C 1523.234705	-0.463116622	0.157348229	-2.94325919	0.003247764	0.012531083	Zc3h18
ENSMUSG0C 2.058116807	-3.158174042	1.073181288	-2.942815047	0.003252427	0.012547036	NA
ENSMUSG0C 558.4187487	-1.048871152	0.356568309	-2.941571431	0.003265515	0.012595483	Akap12
ENSMUSG0C 1810.37545	-0.844016746	0.286972259	-2.94110918	0.003270392	0.012612247	Pdcl3
ENSMUSG0C 956.8495	-0.464158204	0.15784441	-2.940605896	0.00327571	0.012630704	Fam175b
ENSMUSG0C 2.592030061	-3.025243928	1.029047425	-2.939848888	0.003283724	0.012657388	NA
ENSMUSG0C 11.45713937	-1.47415174	0.501574943	-2.939045822	0.003292244	0.01268005	Olf1420
ENSMUSG0C 1201.156488	-0.658697514	0.224218167	-2.937752643	0.003306007	0.012722744	Sptlc1
ENSMUSG0C 9.622802527	-1.681769339	0.572568505	-2.937236897	0.00331151	0.012741859	NA
ENSMUSG0C 54.50641312	-1.869857699	0.636616765	-2.93717948	0.003312124	0.012742155	Klrd1
ENSMUSG0C 3064.948563	-1.049738569	0.357412829	-2.937047813	0.00331353	0.012745019	Ttyh3
ENSMUSG0C 23.17644044	-1.142319587	0.389028583	-2.936338452	0.003321118	0.012770552	NA
ENSMUSG0C 4389.324915	-0.982827333	0.33473244	-2.936158	0.00332305	0.012775915	Pnpla2
ENSMUSG0C 2093.690394	-1.402181042	0.477597917	-2.935902761	0.003325786	0.012780227	Acs1
ENSMUSG0C 2060.376508	-0.549197597	0.187059418	-2.93595266	0.003325251	0.012780227	Map2k4
ENSMUSG0C 3061.619982	-0.869424807	0.296168615	-2.935573738	0.003329315	0.012787583	Etfa
ENSMUSG0C 551.6338233	-0.541546193	0.184501143	-2.935191542	0.003333418	0.012801275	Atpaf1
ENSMUSG0C 844.745664	-0.774622796	0.26392534	-2.93500729	0.003335399	0.012806809	Ankzf1
ENSMUSG0C 2.613626155	-2.672025517	0.910435643	-2.934886763	0.003336694	0.012809714	NA
ENSMUSG0C 4459.774687	-0.796058097	0.271250657	-2.934769281	0.003337958	0.012812494	Anxa11
ENSMUSG0C 1258.252866	-0.510695196	0.1740575	-2.934060279	0.003345592	0.01283765	Herc4
ENSMUSG0C 3.256018949	-3.079145022	1.049768819	-2.93316487	0.003355257	0.012870576	Apol11a
ENSMUSG0C 1215.559915	-0.784025712	0.267322627	-2.932881964	0.003358315	0.012880229	Mon1a
ENSMUSG0C 4610.731279	-1.198840764	0.40878421	-2.932698314	0.003360302	0.012881866	Wsb2
ENSMUSG0C 1380.18171	-1.238034477	0.422142941	-2.932737603	0.003359877	0.012881866	Fchsd2
ENSMUSG0C 15.8278894	-1.266025842	0.431694079	-2.932692159	0.003360369	0.012881866	NA
ENSMUSG0C 2.937351053	-3.071953512	1.047691746	-2.932115792	0.003366612	0.012903716	Dnah3
ENSMUSG0C 396.2931375	-1.005939298	0.343128324	-2.931670827	0.003371439	0.012918049	Ifit1bl1
ENSMUSG0C 6417.625069	-0.564786344	0.192687584	-2.931098798	0.003377653	0.012937687	Aldh2
ENSMUSG0C 13.65953098	-1.427675884	0.487073865	-2.931128082	0.003377335	0.012937687	NA
ENSMUSG0C 510.3431262	-0.697266795	0.237919431	-2.930684526	0.003382161	0.012948688	Lrig2
ENSMUSG0C 2.561944992	-2.675918683	0.913216465	-2.930212919	0.003387298	0.012964179	Sdr9c7
ENSMUSG0C 7140.029073	-0.655384594	0.223683561	-2.92996316	0.003390022	0.012972513	Son
ENSMUSG0C 219.5503488	-0.905442756	0.309185585	-2.928476617	0.003406275	0.013015837	Pcdh19
ENSMUSG0C 82.25197173	-1.159283682	0.395914605	-2.928115474	0.003410234	0.013026774	NA
ENSMUSG0C 24.9921023	-1.277769961	0.4364092	-2.927917103	0.00341241	0.013032993	NA
ENSMUSG0C 983.8678259	-0.751211032	0.256678993	-2.926655679	0.00342628	0.013083862	Necap1
ENSMUSG0C 350.7653498	-1.365948386	0.466758174	-2.926458418	0.003428453	0.013090057	Map1b
ENSMUSG0C 35.41446518	-1.322546642	0.451964308	-2.926219214	0.003431091	0.013095918	Pnpla1
ENSMUSG0C 22.78507284	-1.377153687	0.470744641	-2.925479265	0.003439261	0.013124993	Astn2
ENSMUSG0C 10.14633143	-1.696107759	0.579897876	-2.924838714	0.003446348	0.013147815	Jakmp2
ENSMUSG0C 33.78994453	-1.555116384	0.531713373	-2.924726862	0.003447587	0.013150429	Cd28
ENSMUSG0C 1742.02866	-0.531764943	0.181840132	-2.924354136	0.003451718	0.013164074	Ralgapb
ENSMUSG0C 7652.447771	-0.664100962	0.227188969	-2.923121509	0.003465413	0.013209939	Cap1
ENSMUSG0C 12479.16059	-0.884003038	0.3025179	-2.922151175	0.003476228	0.01324479	Gdi2
ENSMUSG0C 6.497127384	-1.834098853	0.627704343	-2.921915189	0.003478863	0.013252704	NA
ENSMUSG0C 1.702527612	-3.079834183	1.054388816	-2.920966284	0.003489476	0.013286743	Mlc1
ENSMUSG0C 5.956892114	-2.759716981	0.944992342	-2.920359094	0.003496283	0.013306262	NA
ENSMUSG0C 312.0754381	-1.032763785	0.353703654	-2.919856139	0.00350193	0.013323487	Fsd1l
ENSMUSG0C 89.05909502	-1.021040768	0.349699501	-2.919766154	0.003502941	0.0133252	Inpp4b
ENSMUSG0C 1662.640859	-1.475715852	0.505592344	-2.918785995	0.003513974	0.013354337	Asap1

ENSMUSG0C 1968.934936	-1.157401285	0.396568469	-2.918540874	0.003516738	0.013362703	Rmdn3
ENSMUSG0C 251.2716108	-1.29637144	0.444214947	-2.918342681	0.003518974	0.013364787	Cd83
ENSMUSG0C 117.5199728	-1.031584981	0.353531065	-2.917947201	0.00352344	0.013378435	Scg5
ENSMUSG0C 5.05783603	-2.368961547	0.811891946	-2.91782861	0.00352478	0.013378435	Slc4a9
ENSMUSG0C 18531.49159	-2.037508853	0.698483024	-2.917048492	0.003533608	0.013407507	Smim24
ENSMUSG0C 2466.572533	-0.627056394	0.215022559	-2.916235381	0.003542831	0.013433918	Osbp
ENSMUSG0C 1067.416066	-0.581101156	0.199299413	-2.915719349	0.003548696	0.013449715	Casp2
ENSMUSG0C 7.510558853	-1.66788668	0.572046786	-2.915647321	0.003549515	0.013450674	Unc5d
ENSMUSG0C 650.5468856	-0.80339867	0.275617886	-2.914900346	0.003558021	0.013474311	Hexdc
ENSMUSG0C 1532.804295	-1.072842483	0.368103979	-2.914509336	0.003562482	0.013489052	Daam1
ENSMUSG0C 2184.312386	-0.811114918	0.278390385	-2.913588117	0.00357301	0.013523218	Arhgap21
ENSMUSG0C 11518.60895	-0.899084708	0.308585201	-2.913570402	0.003573213	0.013523218	Efh2
ENSMUSG0C 5.891816969	-2.232748132	0.766386053	-2.913346509	0.003575776	0.013530763	NA
ENSMUSG0C 37.5791124	-1.490556675	0.512130559	-2.910501334	0.003608494	0.013643704	BC051142
ENSMUSG0C 1817.605603	-0.9969005	0.342598355	-2.909822785	0.003616337	0.013671183	Mpc1
ENSMUSG0C 20268.57118	-2.164090377	0.74396087	-2.908876614	0.0036273	0.013704386	Guca2b
ENSMUSG0C 37.59697785	-1.322581454	0.454672593	-2.908865574	0.003627428	0.013704386	Gpr85
ENSMUSG0C 59.29157813	-0.99143365	0.34089926	-2.908289243	0.00363412	0.013723123	NA
ENSMUSG0C 14.54188184	-1.400830799	0.481663841	-2.908316298	0.003633806	0.013723123	NA
ENSMUSG0C 6.765735762	-2.082530109	0.716262933	-2.907493902	0.003643374	0.013755881	NA
ENSMUSG0C 549.3401868	-0.827733054	0.284700702	-2.907379744	0.003644705	0.013758716	2010315B03Rik
ENSMUSG0C 774.7723929	-0.848246404	0.291878767	-2.906160024	0.003658943	0.013803691	Papd4
ENSMUSG0C 7.170710442	-1.944010333	0.669118003	-2.905332577	0.003668631	0.013835845	NA
ENSMUSG0C 4.909101781	-2.276343256	0.783547803	-2.905174702	0.003670482	0.013836236	NA
ENSMUSG0C 7.979704828	-2.249618764	0.774616668	-2.904170354	0.003682277	0.013876298	3425401B19Rik
ENSMUSG0C 1200.001136	-1.46316072	0.503830312	-2.904074419	0.003683406	0.013878349	Dyrk2
ENSMUSG0C 912.9744626	-0.778011377	0.268027599	-2.902728597	0.003699271	0.013929288	Apba3
ENSMUSG0C 11.67251342	-2.86163057	0.985813119	-2.902812425	0.003698281	0.013929288	NA
ENSMUSG0C 42.42290485	-1.923252529	0.662640853	-2.90240561	0.003703087	0.013939296	Etnppl
ENSMUSG0C 988.4908618	-2.974024642	1.024916917	-2.90172266	0.003711169	0.013965237	Enpp7
ENSMUSG0C 1.717035715	-3.070755726	1.058325576	-2.901522741	0.003713538	0.013969725	Cdh12
ENSMUSG0C 3408.982372	-0.485697335	0.167405475	-2.901322883	0.003715908	0.013976426	Csnk1g2
ENSMUSG0C 1.974664667	-3.131416407	1.079796096	-2.900007158	0.003731541	0.014025325	NA
ENSMUSG0C 79.03034664	-0.84706522	0.292093379	-2.899980902	0.003731854	0.014025325	NA
ENSMUSG0C 13.93063392	-1.240425772	0.427741262	-2.899944152	0.003732292	0.014025325	NA
ENSMUSG0C 66.71325265	-1.189125108	0.410064972	-2.899845605	0.003733465	0.014026917	Klhdc8a
ENSMUSG0C 7015.133599	-1.24508563	0.429489058	-2.898992667	0.003743636	0.014058926	Pcyt2
ENSMUSG0C 1025.965107	-0.717857122	0.247641501	-2.898775522	0.00374623	0.014065978	Ap1m1
ENSMUSG0C 1634.208935	-0.838628587	0.289350453	-2.898314407	0.003751743	0.014080985	Rnf19a
ENSMUSG0C 1563.228782	-0.909687267	0.313898951	-2.898025829	0.003755197	0.014090736	Specc1
ENSMUSG0C 110.3306588	-1.367751521	0.472001303	-2.897770647	0.003758253	0.014099978	Dnm3
ENSMUSG0C 1814.298975	-0.816636245	0.282004703	-2.89582492	0.003781633	0.014178737	Cask
ENSMUSG0C 381.0777085	-0.694875861	0.240050106	-2.894711738	0.003795069	0.014220161	Zfp869
ENSMUSG0C 51.10128377	-2.268913099	0.7842415	-2.893130624	0.003814226	0.014280656	Acsm5
ENSMUSG0C 108.6655229	-2.211548393	0.764973942	-2.891011407	0.003840042	0.014361466	Mro
ENSMUSG0C 3163.693034	-0.867568284	0.300135683	-2.890586938	0.003845232	0.014376349	Fryl
ENSMUSG0C 468.3930374	-0.971887624	0.336439478	-2.888744303	0.003867834	0.014455971	Gbe1
ENSMUSG0C 21.42279378	-1.245966606	0.431324071	-2.88870177	0.003868358	0.014455971	Stag3
ENSMUSG0C 3.626219502	-2.441191591	0.845331568	-2.887850972	0.003878836	0.014486029	Rsph4a
ENSMUSG0C 3657.786973	-0.703588058	0.243812117	-2.885779702	0.003904454	0.014572613	NA
ENSMUSG0C 678.0729732	-0.592211757	0.205245891	-2.885376915	0.003909453	0.014588904	Pyroxd1
ENSMUSG0C 14.84586184	-2.65227022	0.919266204	-2.885203663	0.003911605	0.014594643	NA
ENSMUSG0C 1.576524909	-3.035133413	1.052136183	-2.884734374	0.00391744	0.014607547	Slc17a6
ENSMUSG0C 132.250874	-0.792049561	0.274552666	-2.884872953	0.003915716	0.014607547	Taf9b
ENSMUSG0C 1582.627409	-0.810148831	0.280880438	-2.88431917	0.00392261	0.014620522	Tbk1
ENSMUSG0C 34.66759319	-1.256365045	0.435587516	-2.884299939	0.003922849	0.014620522	P2rx6
ENSMUSG0C 1868.830236	-1.061188191	0.368008227	-2.883599095	0.003931589	0.014650798	Dst
ENSMUSG0C 97.60894385	-0.896931467	0.311121623	-2.882896588	0.003940368	0.014676603	Phactr1
ENSMUSG0C 2355.212429	-0.65673319	0.227837051	-2.882468792	0.003945722	0.014694243	Abhd17a
ENSMUSG0C 5058.877981	-0.611452306	0.212134432	-2.882381239	0.003946819	0.014696023	Cant1
ENSMUSG0C 21.11147733	-1.531941406	0.531532351	-2.882122609	0.00395006	0.014705787	Grin3a
ENSMUSG0C 8.383951269	-1.95720942	0.67919581	-2.881657089	0.0039559	0.014722914	NA
ENSMUSG0C 503.8670976	-0.448076064	0.15550296	-2.881463242	0.003958334	0.014729665	Slc9a6
ENSMUSG0C 6.774404427	-2.088264152	0.724974749	-2.880464669	0.003970895	0.014767153	NA
ENSMUSG0C 1797.435116	-0.454601724	0.157844984	-2.880051759	0.003976099	0.014784192	Arfgef2
ENSMUSG0C 6.716953096	-2.07544227	0.720891423	-2.878994262	0.003989456	0.014829215	NA
ENSMUSG0C 5.964822527	-1.738375359	0.603824227	-2.878942715	0.003990108	0.014829319	4930554C24Rik

ENSMUSG0C 299.3679016	-1.116341414	0.387832361	-2.87841224	0.003996825	0.014849635	S1pr3
ENSMUSG0C 63.78568232	-0.830373855	0.288496725	-2.878278272	0.003998523	0.014851298	Lrrc48
ENSMUSG0C 846.4880161	-0.694129442	0.24128895	-2.876756034	0.004017861	0.014909767	Pxylp1
ENSMUSG0C 2.130399381	-2.876062765	0.999763629	-2.876742743	0.00401803	0.014909767	NA
ENSMUSG0C 32595.42324	-1.007776335	0.350334272	-2.876613612	0.004019675	0.014913539	ND2
ENSMUSG0C 1361.127316	-0.813166956	0.282840063	-2.87500627	0.004040195	0.014970967	Cebpa
ENSMUSG0C 621.9383126	-1.332705648	0.463637388	-2.874456815	0.004047231	0.014994701	LOC108168395
ENSMUSG0C 5.085219178	-1.902630559	0.661943545	-2.874309408	0.004049121	0.014997024	Slc24a2
ENSMUSG0C 9.091744381	-1.573847871	0.547725279	-2.873425659	0.004060466	0.015036701	Chrna5
ENSMUSG0C 514.1863678	-1.116418558	0.388599092	-2.872931466	0.004066823	0.015054221	Osbpl1a
ENSMUSG0C 8.787584273	-1.535099126	0.534369014	-2.872732298	0.004069388	0.015060348	S100z
ENSMUSG0C 1509.909918	-0.510955	0.177933514	-2.871606298	0.004083914	0.015109401	Acp2
ENSMUSG0C 2911.385907	-1.461287849	0.509009215	-2.870847529	0.004093729	0.015138641	Acy1
ENSMUSG0C 5049.284937	-0.713674773	0.24859113	-2.870877863	0.004093336	0.015138641	Add1
ENSMUSG0C 11.41030486	-1.442708768	0.502566387	-2.870682972	0.004095861	0.01514181	NA
ENSMUSG0C 1269.536121	-0.516605836	0.179968077	-2.87054151	0.004097694	0.015143873	Fibp
ENSMUSG0C 287.3933847	-0.903043618	0.314619116	-2.870275747	0.00410114	0.015151894	Ocel1
ENSMUSG0C 2089.011161	-0.965906231	0.336545822	-2.870058604	0.004103957	0.015159946	Irf7
ENSMUSG0C 11.82996091	-1.61365892	0.562321511	-2.869637543	0.004109426	0.015177785	B230206H07Rik
ENSMUSG0C 2800.569506	-0.640975882	0.223403274	-2.869142749	0.00411586	0.015199187	Ensa
ENSMUSG0C 1365.686197	-0.43004102	0.149887502	-2.869091916	0.004116522	0.015199267	Gosr1
ENSMUSG0C 754.7399729	-0.786281318	0.274184494	-2.867708914	0.004134557	0.015258745	Zcchc9
ENSMUSG0C 1655.781005	-0.894894607	0.312118562	-2.867162404	0.004141704	0.015280373	Mafk
ENSMUSG0C 1460.979878	-0.72890092	0.254232397	-2.86706544	0.004142973	0.015282682	Acbd5
ENSMUSG0C 3.045324962	-2.523767124	0.880297343	-2.866948474	0.004144505	0.015285958	Lipn
ENSMUSG0C 2680.553198	-1.096916202	0.382675086	-2.866442685	0.004151133	0.015308029	Ick
ENSMUSG0C 126.6636273	-0.99819649	0.34829286	-2.865968861	0.004157351	0.015326201	Fgf9
ENSMUSG0C 6901.586176	-0.397442706	0.138674379	-2.866013962	0.004156759	0.015326201	Lrp10
ENSMUSG0C 4.97840559	-2.456956801	0.857920774	-2.863850456	0.004185256	0.015417108	NA
ENSMUSG0C 1300.357624	-0.903514444	0.315628538	-2.862587932	0.004201966	0.015471771	Elovl7
ENSMUSG0C 1781.220633	-0.701870361	0.245187884	-2.862581749	0.004202048	0.015471771	Prosc
ENSMUSG0C 12.37596188	-1.370798729	0.479094003	-2.861231243	0.004219991	0.015525803	4833422M21Rik
ENSMUSG0C 1149.455853	-0.563478336	0.196971685	-2.860707301	0.004226971	0.015544261	Prdm4
ENSMUSG0C 397.4180465	-0.790017383	0.276216054	-2.860142887	0.004234502	0.015569544	Ap5b1
ENSMUSG0C 96.19323942	-0.673580862	0.235533061	-2.859814499	0.004238889	0.015578441	8430429K09Rik
ENSMUSG0C 1012.041077	-1.058101422	0.370001867	-2.859719145	0.004240163	0.015580715	Bmp2k
ENSMUSG0C 93.13354475	-2.018343626	0.706085658	-2.858496846	0.004256533	0.015633613	Ptprcap
ENSMUSG0C 1833.798611	-0.649380558	0.227179845	-2.858442653	0.004257261	0.015633866	Vamp2
ENSMUSG0C 3035.437692	-0.50079045	0.175262381	-2.857375591	0.0042716	0.015679255	2510039O18Rik
ENSMUSG0C 1100.69785	-0.488188534	0.170859702	-2.857247959	0.004273319	0.015681591	Kdm4b
ENSMUSG0C 376.3666181	-0.692001758	0.242197362	-2.857181234	0.004274217	0.015681591	Pdss2
ENSMUSG0C 4.363989355	-2.740107303	0.959424919	-2.855989301	0.004290296	0.015733293	Agtr1b
ENSMUSG0C 892.4630994	-0.899886039	0.315104919	-2.855829868	0.004292451	0.015734778	Hivep1
ENSMUSG0C 7.297765065	-2.510337268	0.879038758	-2.855775408	0.004293187	0.015734778	NA
ENSMUSG0C 17.91520879	-1.860914429	0.651770694	-2.855167387	0.004301415	0.015761903	Isl1
ENSMUSG0C 539.1876844	-0.689536112	0.241523033	-2.8549497	0.004304365	0.015767846	Fig4
ENSMUSG0C 3447.13905	-0.606197231	0.212511501	-2.852538471	0.004337156	0.015875729	Dcaf11
ENSMUSG0C 6378.15701	-1.520469295	0.533017948	-2.852566785	0.00433677	0.015875729	Dgat2
ENSMUSG0C 556.9285164	-0.593182814	0.208100111	-2.850468519	0.004365487	0.015974509	Mad2l1bp
ENSMUSG0C 22.45261554	-2.08514829	0.73165266	-2.849915546	0.004373084	0.015994916	Lrp2
ENSMUSG0C 5.635204034	-2.607810252	0.915155798	-2.84958065	0.004377691	0.016009301	NA
ENSMUSG0C 1.908829302	-3.073174099	1.078658052	-2.849071672	0.0043847	0.016032467	Cd209e
ENSMUSG0C 896.1549925	-0.715596169	0.251181868	-2.848916504	0.004386839	0.016037819	Nbeal1
ENSMUSG0C 2.368459269	-2.904510286	1.019588	-2.84870976	0.004389691	0.016045775	Ptprt
ENSMUSG0C 7.24175412	-1.979557132	0.694943166	-2.848516583	0.004392356	0.016053049	NA
ENSMUSG0C 137.6012012	-2.068056759	0.726238683	-2.847626832	0.004404654	0.016093042	H2-DMb2
ENSMUSG0C 895.4007655	-0.752410124	0.264310692	-2.846688185	0.004417661	0.016135602	Dcbl1
ENSMUSG0C 1096.816226	-0.746537121	0.26231922	-2.845910875	0.004428459	0.016172554	Tcf7l2
ENSMUSG0C 3720.53214	-0.509309504	0.178986597	-2.845517555	0.004433932	0.016187564	Rab1b
ENSMUSG0C 1073.892912	-1.234901218	0.434067665	-2.844950956	0.004441826	0.016213894	Il18
ENSMUSG0C 4787.730207	-0.963245031	0.338595407	-2.844826041	0.004443568	0.01621527	Max
ENSMUSG0C 2057.195544	-0.668916799	0.235207992	-2.843937376	0.004455981	0.016255548	Ralgds
ENSMUSG0C 52.9618768	-1.583615039	0.556843323	-2.843914929	0.004456294	0.016255548	Abcg3
ENSMUSG0C 141.0036816	-0.688937811	0.242260348	-2.84379106	0.004458027	0.016255548	Rsph3a
ENSMUSG0C 3877.271823	-1.423186694	0.500495623	-2.843554725	0.004461335	0.016262616	Slc25a15
ENSMUSG0C 2.690288711	-3.161053938	1.112036657	-2.8425807	0.00447499	0.016299887	Mir143
ENSMUSG0C 3527.795944	-0.516623998	0.181756804	-2.842391519	0.004477647	0.016307063	Clptm1l

ENSMUSG0C 3928.80287	-0.81614839	0.287203786	-2.84170484	0.004487301	0.01633221	Ggnbp2
ENSMUSG0C 31.32322378	-1.228300332	0.432359509	-2.840923596	0.004498309	0.016362245	NA
ENSMUSG0C 999.8196613	-0.573188868	0.201786754	-2.840567364	0.004503336	0.016375517	Aggf1
ENSMUSG0C 2921.144358	-0.460973851	0.162306069	-2.840151651	0.004509209	0.016391633	Uhmk1
ENSMUSG0C 801.4681803	-1.718415371	0.605053005	-2.840107162	0.004509838	0.016391633	Ifit1bl2
ENSMUSG0C 9.956301644	-1.614506215	0.568463921	-2.840120817	0.004509645	0.016391633	A730056A06Rik
ENSMUSG0C 10194.18881	-2.048934534	0.721564227	-2.839573329	0.004517391	0.016411553	Creb3l3
ENSMUSG0C 2072.34893	-0.821610435	0.289570193	-2.837344638	0.004549048	0.016518983	Nfat5
ENSMUSG0C 9.716320427	-1.584161414	0.558505717	-2.836428287	0.004562122	0.016561396	Anks1b
ENSMUSG0C 48.42019819	-1.519410831	0.535711605	-2.836247741	0.004564702	0.01656823	Efh1
ENSMUSG0C 17.75787486	-1.992456531	0.702591658	-2.835867049	0.004570147	0.016585011	NA
ENSMUSG0C 17.70755245	-1.858345366	0.655309882	-2.835826862	0.004570722	0.016585011	Gm1965
ENSMUSG0C 700.1306141	-1.693167617	0.597220366	-2.835080172	0.004581419	0.016611139	Fbp1
ENSMUSG0C 4.296103186	-2.905922329	1.025057791	-2.834886341	0.004584199	0.016618684	Gm10532
ENSMUSG0C 1960.721913	-0.623451355	0.21993365	-2.834724721	0.004586519	0.016624556	Slain2
ENSMUSG0C 30.22617622	-1.352409421	0.47715463	-2.834321069	0.004592317	0.016640494	Pde6a
ENSMUSG0C 1433.347485	-0.761765156	0.268822052	-2.833715277	0.004601031	0.016666984	Gpsm2
ENSMUSG0C 362.9462061	-1.117508042	0.394460441	-2.833004086	0.00461128	0.016691385	Bahcc1
ENSMUSG0C 736.8291204	-0.529430696	0.186939136	-2.832101967	0.00462431	0.016728355	Snx14
ENSMUSG0C 718.1728854	-1.089252565	0.384681345	-2.831571063	0.004631994	0.016753601	Lrrc26
ENSMUSG0C 325.4088496	-0.636124894	0.22466654	-2.83141804	0.004634211	0.016759067	Inpp1
ENSMUSG0C 10.09680763	-1.79221335	0.633087868	-2.830907747	0.004641611	0.016783273	Klri2
ENSMUSG0C 39.9158075	-1.503669963	0.531265404	-2.830355509	0.004649631	0.016809714	Jph1
ENSMUSG0C 13.37274448	-1.21913464	0.430860997	-2.829531216	0.004661625	0.016850513	NA
ENSMUSG0C 1614.822033	-0.716994379	0.253402765	-2.829465486	0.004662583	0.01685141	Clock
ENSMUSG0C 87.04673333	-1.543034875	0.545407752	-2.829139977	0.004667328	0.016865994	NA
ENSMUSG0C 1492.965198	-0.719125659	0.254337602	-2.827445302	0.004692103	0.016950365	Asap2
ENSMUSG0C 14.62809038	-1.13605389	0.401833419	-2.82717623	0.004696048	0.016962035	Nap1l3
ENSMUSG0C 241.2301438	-1.203191943	0.425672799	-2.826565253	0.004705016	0.01698668	Tmem47
ENSMUSG0C 308.7124794	-0.815198157	0.288426278	-2.826365758	0.004707947	0.016994681	Fbxl15
ENSMUSG0C 57.35242072	-2.398508133	0.848679145	-2.826165986	0.004710885	0.0170027	Gm9992
ENSMUSG0C 4966.816821	-0.93746031	0.296591223	-2.823617982	0.004748495	0.017125434	Tnfrsf1a
ENSMUSG0C 2379.068718	-1.109122538	0.392845008	-2.823308213	0.004753085	0.017136788	Fam134b
ENSMUSG0C 168.674574	-0.828597718	0.293518353	-2.822984357	0.004757889	0.017146301	Tmem8b
ENSMUSG0C 273.4903357	-0.82061429	0.29069728	-2.82291699	0.004758889	0.017147303	Pdzd2
ENSMUSG0C 19.01815127	-2.409786512	0.853705858	-2.822736298	0.004761572	0.01715311	NA
ENSMUSG0C 6260.61903	-1.412629123	0.500486909	-2.822509639	0.004764939	0.017161293	Hmgcs1
ENSMUSG0C 7512.422429	-1.989421228	0.704895288	-2.82229327	0.004768155	0.017170274	Ada
ENSMUSG0C 3754.417672	-0.880878116	0.312165572	-2.82182981	0.004775051	0.0171925	Reep3
ENSMUSG0C 36.88263392	-2.249714923	0.79740009	-2.8213126	0.004782757	0.017217636	NA
ENSMUSG0C 701.3238201	-0.648473184	0.230006196	-2.81937267	0.004811762	0.017311557	Scyl3
ENSMUSG0C 689.2619791	-0.924324862	0.327886301	-2.819040805	0.004816739	0.017322681	A430105I19Rik
ENSMUSG0C 3.602280343	-2.37067647	0.841093083	-2.818566124	0.004823867	0.017342774	Prima1
ENSMUSG0C 19.29165505	-1.421994097	0.504576117	-2.818195409	0.004829441	0.017359388	NA
ENSMUSG0C 131.6201525	-1.222398139	0.433836004	-2.81765028	0.004837647	0.017383625	Il2rb
ENSMUSG0C 526.8786454	-0.686306449	0.243666061	-2.81658613	0.004853703	0.017435889	Auh
ENSMUSG0C 6033.328424	-0.486346685	0.172743606	-2.815425104	0.004871275	0.017480666	Pafah1b1
ENSMUSG0C 1716.971907	-0.383471704	0.136202118	-2.815460657	0.004870736	0.017480666	Gabpb2
ENSMUSG0C 3.330855956	-2.555753282	0.907957339	-2.814838509	0.004880175	0.017506867	NA
ENSMUSG0C 1077.129954	-0.965742499	0.343171629	-2.814167656	0.004890372	0.017533303	Jade1
ENSMUSG0C 727.1871225	-0.678660466	0.241184337	-2.813866257	0.004894959	0.017547102	Foxj2
ENSMUSG0C 6216.731628	-0.693898772	0.246730478	-2.812375579	0.004917704	0.017620662	Atp9a
ENSMUSG0C 245.1765757	-0.828210612	0.294658516	-2.810747245	0.00494266	0.017704738	Foxn3
ENSMUSG0C 585.1395755	-1.038426052	0.369550647	-2.809969514	0.004954619	0.017744902	Tbc1d2
ENSMUSG0C 1997.910515	-1.371889008	0.488317647	-2.809419275	0.004963096	0.017769905	Slc37a4
ENSMUSG0C 10.85911838	-1.325895167	0.472173816	-2.808065845	0.004984004	0.017831323	NA
ENSMUSG0C 3027.715495	-0.556565888	0.198207864	-2.807990942	0.004985163	0.017832786	Afg3l2
ENSMUSG0C 26.61389576	-1.180362063	0.42040968	-2.807647202	0.004990487	0.017843769	NA
ENSMUSG0C 5.926914157	-2.283775252	0.813658266	-2.806799056	0.005003644	0.017885431	NA
ENSMUSG0C 284.929363	-0.561604632	0.20027119	-2.804220781	0.005043835	0.018015539	Atg4a
ENSMUSG0C 11.36183824	-1.523392129	0.543264688	-2.804143472	0.005045045	0.018017151	NA
ENSMUSG0C 1510.252381	-0.802628254	0.286249693	-2.803944504	0.005048159	0.018022854	Abhd14b
ENSMUSG0C 16.26577899	-1.346584024	0.480246263	-2.803944826	0.005048154	0.018022854	NA
ENSMUSG0C 336.7713071	-0.513283913	0.183080668	-2.803594281	0.005053645	0.01803973	Slc10a3
ENSMUSG0C 2512.504434	-0.468701785	0.167238181	-2.802600352	0.005069244	0.018081827	Man1b1
ENSMUSG0C 14028.83645	-1.691596338	0.603707462	-2.802013299	0.005078478	0.018109325	Ace
ENSMUSG0C 306.7881235	-1.226212893	0.437702365	-2.801476507	0.005086934	0.018127779	Lmbrd2



ENSMUSG0C 525.5496096	-1.194252096	0.426292401	-2.801485771	0.005086788	0.018127779	Foxf1
ENSMUSG0C 1263.923213	-1.313928206	0.469004131	-2.801528004	0.005086123	0.018127779	Mfsd7b
ENSMUSG0C 37.2554504	-1.018914478	0.363710634	-2.801442636	0.005087469	0.018127779	Man2c1os
ENSMUSG0C 39.34040674	-2.07292997	0.740028352	-2.801149395	0.005092094	0.018138819	NA
ENSMUSG0C 3694.305654	-0.831466652	0.296971211	-2.799822416	0.005113073	0.018208088	Hipk1
ENSMUSG0C 14.8460534	-1.262958974	0.45140234	-2.797856509	0.005144296	0.018311042	Ccdc108
ENSMUSG0C 902.2054714	-0.541465494	0.193534304	-2.797775294	0.005145559	0.018312407	Scaf4
ENSMUSG0C 211.6953521	-0.616079931	0.220221087	-2.797551951	0.005149149	0.01832008	Zfp758
ENSMUSG0C 20.1377297	-1.299695127	0.464612352	-2.79737532	0.005151965	0.018327355	NA
ENSMUSG0C 1059.729445	-0.537037053	0.192028822	-2.796648164	0.005163573	0.018362932	Trappc6b
ENSMUSG0C 740.6828795	-0.75145485	0.268702667	-2.796603614	0.005164285	0.018362932	Rasa1
ENSMUSG0C 62.96336881	-1.636501298	0.585158582	-2.796679993	0.005163064	0.018362932	Col4a6
ENSMUSG0C 755.1595673	-0.976664379	0.349373134	-2.79547648	0.005182327	0.018405913	Lats2
ENSMUSG0C 3958.29469	-0.455351483	0.162889233	-2.795467052	0.005182478	0.018405913	Rab14
ENSMUSG0C 11.8436307	-1.285690539	0.459899853	-2.795588061	0.005180539	0.018405913	NA
ENSMUSG0C 1317.588659	-0.649196718	0.232244326	-2.795317883	0.005184871	0.018411328	Cisd1
ENSMUSG0C 6923.024529	-0.818083477	0.292707982	-2.794879287	0.00519191	0.01842806	Vat1
ENSMUSG0C 2.871111381	-2.686583587	0.961246281	-2.79489621	0.005191638	0.01842806	NA
ENSMUSG0C 1029.378323	-0.967840091	0.346356199	-2.794348982	0.005200432	0.018452796	Pik3c2b
ENSMUSG0C 98.77986213	-1.3039641	0.466688752	-2.794076555	0.005204816	0.018465591	Itga8
ENSMUSG0C 60.38487728	-1.36297744	0.487838032	-2.79391386	0.005207435	0.018469367	Olfr509
ENSMUSG0C 51.60688994	-1.077195467	0.385602755	-2.793536752	0.00521351	0.018485396	P2rx2
ENSMUSG0C 32.55769921	-1.205445891	0.431505447	-2.793582093	0.00521278	0.018485396	NA
ENSMUSG0C 1438.942216	-1.00877426	0.361119159	-2.79346646	0.005214644	0.018486655	Samd9l
ENSMUSG0C 2077.992522	-1.487910663	0.532828871	-2.792473802	0.00523067	0.018540705	Sec16b
ENSMUSG0C 37.16197065	-1.651249907	0.591399544	-2.79210548	0.005236628	0.018559054	Timp4
ENSMUSG0C 2.640247849	-2.903654517	1.040040921	-2.791865646	0.005240511	0.018567275	LOC102634296
ENSMUSG0C 1233.444704	-1.101144274	0.39444054	-2.791661003	0.005243826	0.018576251	Ccdc120
ENSMUSG0C 13.72978851	-1.317716715	0.472084595	-2.791272431	0.005250126	0.018593023	Musk
ENSMUSG0C 29.01861244	-1.83359894	0.657013541	-2.790808447	0.005257658	0.018614146	NA
ENSMUSG0C 583.8631465	-1.048214802	0.375716417	-2.789909505	0.005272278	0.018663124	Ints6l
ENSMUSG0C 10.30974738	-1.602744956	0.574776029	-2.788468684	0.005295787	0.018728355	Syt15
ENSMUSG0C 2.041933401	-2.844073759	1.019950853	-2.788441962	0.005296224	0.018728355	NA
ENSMUSG0C 73.43029079	-1.503928552	0.53957369	-2.787253305	0.005315691	0.018786009	Mrgprf
ENSMUSG0C 7.212954359	-2.398064407	0.86036289	-2.787270854	0.005315403	0.018786009	NA
ENSMUSG0C 226.6133971	-0.652987169	0.23435323	-2.786337397	0.005330735	0.018833574	Zkscan7
ENSMUSG0C 727.9735812	-0.732858164	0.263058844	-2.785909617	0.005337775	0.018855642	Jmy
ENSMUSG0C 443.6134383	-0.586997966	0.210749964	-2.785281453	0.005348128	0.018886595	Rnf214
ENSMUSG0C 86.84959303	-1.998912865	0.717709338	-2.785128685	0.005350648	0.018892688	NA
ENSMUSG0C 6.664147267	-1.738207261	0.624201407	-2.78468975	0.005357896	0.018915468	NA
ENSMUSG0C 4.280127015	-2.530255712	0.908723318	-2.784407159	0.005362567	0.018929145	A530016L24Rik
ENSMUSG0C 1455.204632	-0.948476674	0.340714842	-2.783784439	0.005372873	0.018957072	Arpin
ENSMUSG0C 15.85967266	-1.919156296	0.689403291	-2.783793348	0.005372725	0.018957072	Ptgdr
ENSMUSG0C 35.4094579	-1.754972446	0.630476323	-2.783565985	0.005376493	0.018967026	Sez6l
ENSMUSG0C 75.8949283	-1.19843324	0.430698864	-2.782531696	0.00539366	0.019016292	Ptar1
ENSMUSG0C 2899.610199	-0.567513787	0.203964721	-2.782411513	0.005395658	0.019020514	Fam134a
ENSMUSG0C 10.46416148	-1.338320137	0.481034373	-2.782171532	0.005399649	0.019031761	Olfr575
ENSMUSG0C 64.81969017	-1.013697435	0.364457149	-2.781389902	0.005412669	0.019074819	NA
ENSMUSG0C 876.8852048	-0.656729121	0.23625686	-2.779725092	0.005440493	0.019152988	Chn2
ENSMUSG0C 21.80809758	-1.108724419	0.398854346	-2.779772694	0.005439696	0.019152988	Serpinc1
ENSMUSG0C 3098.539915	-1.721839628	0.619420239	-2.779760042	0.005439908	0.019152988	Bst1
ENSMUSG0C 32.45393557	-1.068216959	0.384339406	-2.779358403	0.005446639	0.019171783	Ccdc60
ENSMUSG0C 5957.11699	-0.867632855	0.312341751	-2.777831818	0.005472293	0.019256377	Clint1
ENSMUSG0C 61.07488844	-1.205422818	0.434124968	-2.776672405	0.00549185	0.019319471	NA
ENSMUSG0C 264.0462739	-1.156136063	0.416401107	-2.776496134	0.005494829	0.019327088	Pdpr
ENSMUSG0C 142.4752246	-0.812457149	0.292770669	-2.775063334	0.005519096	0.019401697	Cpeb3
ENSMUSG0C 421.5983556	-0.932113325	0.335985663	-2.774265177	0.005532656	0.019442866	2810013P06Rik
ENSMUSG0C 59.49211848	-1.294876637	0.466763419	-2.774160496	0.005534437	0.019446247	Nkg7
ENSMUSG0C 1120.855465	-0.468298802	0.168825408	-2.77386448	0.005539475	0.019455317	Bloc1s6
ENSMUSG0C 2043.529455	-0.917857766	0.330935337	-2.773526012	0.005545241	0.019472689	Rap2c
ENSMUSG0C 621.8871842	-0.63335664	0.228435797	-2.772580523	0.005561376	0.019523577	Ulk2
ENSMUSG0C 3.962807001	-2.629965859	0.948672861	-2.772257928	0.005566891	0.01954005	NA
ENSMUSG0C 765.5961197	-1.046037855	0.377416125	-2.771577008	0.005578548	0.019572387	Nnt
ENSMUSG0C 2177.595401	-2.015709782	0.727279435	-2.771575389	0.005578575	0.019572387	Cyp2c65
ENSMUSG0C 53.73202628	-1.131957093	0.408440229	-2.771414305	0.005581336	0.019579182	A430035B10Rik
ENSMUSG0C 2927.752802	-1.286544056	0.464292004	-2.770980429	0.005588779	0.019599502	Epha2
ENSMUSG0C 1706.933349	-0.803344809	0.289930091	-2.770822461	0.00559149	0.019606118	Acp6



ENSMUSG0C 185.2835962	-2.044834125	0.738053906	-2.770575576	0.005595731	0.019618092	1700016C15Rik
ENSMUSG0C 2493.426527	-0.838086064	0.302538344	-2.770181298	0.00560251	0.019636061	Sc5d
ENSMUSG0C 10.43029096	-2.054616059	0.741752229	-2.769949287	0.005606502	0.019647155	Klhl33
ENSMUSG0C 197.9592638	-1.849679611	0.667940248	-2.769229157	0.00561891	0.019684829	Hoxc8
ENSMUSG0C 13.79498267	-1.234106207	0.445668726	-2.769111081	0.005620947	0.019689061	NA
ENSMUSG0C 361.7441566	-1.784303754	0.644514019	-2.768448321	0.005632392	0.019726242	NA
ENSMUSG0C 53.45141718	-0.692549569	0.250176729	-2.768241367	0.00563597	0.019735864	Gm9920
ENSMUSG0C 1962.265274	-0.585992785	0.211786131	-2.766908213	0.005659069	0.019796324	R3hdm2
ENSMUSG0C 433.0867305	-0.906672027	0.327701178	-2.766764625	0.005661562	0.019802128	Ntn4
ENSMUSG0C 20.99039854	-1.323317768	0.478534986	-2.765352179	0.005686137	0.019879304	Cpvl
ENSMUSG0C 2023.134057	-1.004152848	0.363154169	-2.765086933	0.005690763	0.019892549	Ppp1r16a
ENSMUSG0C 1063.286159	-0.806097973	0.291630062	-2.764111378	0.005707805	0.019937454	Tmem246
ENSMUSG0C 20.79796708	-1.531549584	0.554221009	-2.763427513	0.00571978	0.019973406	NA
ENSMUSG0C 1582.23216	-0.839655114	0.303873664	-2.763171718	0.005724264	0.019980256	Lipa
ENSMUSG0C 713.2893147	-0.623319359	0.225578392	-2.763205075	0.005723679	0.019980256	Elmo1
ENSMUSG0C 17.60152272	-1.742902516	0.630779572	-2.763092834	0.005725648	0.019982149	NA
ENSMUSG0C 68.3106388	-1.244411031	0.450462116	-2.762520949	0.005735688	0.020014249	Zbed6
ENSMUSG0C 29.77798332	-2.375440979	0.859901756	-2.762456248	0.005736825	0.020015276	NA
ENSMUSG0C 18.49645359	-1.383968844	0.501023773	-2.76228179	0.005739892	0.020017156	2900011O08Rik
ENSMUSG0C 2305.345385	-0.683291473	0.24737422	-2.762177374	0.005741728	0.02002062	Fndc3a
ENSMUSG0C 641.2809359	-0.454906156	0.16473639	-2.761418749	0.005755083	0.020064245	Spg11
ENSMUSG0C 4.244419557	-2.515570794	0.911430221	-2.760025657	0.005779682	0.020138183	Ncr1
ENSMUSG0C 5.541813681	-2.005486019	0.727125394	-2.758102022	0.005813805	0.020254106	Chia1
ENSMUSG0C 48.43828571	-0.972902544	0.352861321	-2.757181037	0.005830206	0.02030529	Hnmt
ENSMUSG0C 2.553870323	-2.577513561	0.934874312	-2.757069617	0.005832193	0.020309233	NA
ENSMUSG0C 30.56942686	-1.365315042	0.495352843	-2.756247515	0.005846873	0.020354385	NA
ENSMUSG0C 122.6778219	-0.971983132	0.352744706	-2.755486091	0.0058605	0.020389869	Vstm4
ENSMUSG0C 292.9373668	-0.489745203	0.177770768	-2.75492539	0.005870552	0.020418863	Zfp839
ENSMUSG0C 683.7227466	-1.197284986	0.434743944	-2.754000379	0.00588717	0.020473666	Tppp3
ENSMUSG0C 188.2394036	-1.473575387	0.535166528	-2.753489446	0.005896367	0.020502649	Cadm3
ENSMUSG0C 1132.421796	-0.542851963	0.197185814	-2.752997037	0.005905243	0.020527747	Vcpip1
ENSMUSG0C 3204.152228	-0.686791133	0.24948222	-2.75286605	0.005907606	0.020532713	Ei24
ENSMUSG0C 195.3715857	-2.204831513	0.80121712	-2.751852722	0.005925916	0.020587317	NA
ENSMUSG0C 2858.546304	-0.753588947	0.273857086	-2.751759899	0.005927596	0.020590142	Ip6k1
ENSMUSG0C 1765.687857	-0.716450468	0.260483912	-2.750459571	0.005951173	0.020654148	Frmd8
ENSMUSG0C 646.0476716	-0.42989575	0.156299814	-2.750455935	0.00595124	0.020654148	Phf8
ENSMUSG0C 4.494691893	-2.038556961	0.741230574	-2.750233235	0.005955286	0.020662155	NA
ENSMUSG0C 610.1077462	-0.648374105	0.235851963	-2.749072331	0.00597642	0.020729424	9930021J03Rik
ENSMUSG0C 1728.854039	-0.735903298	0.267800414	-2.747954296	0.005996837	0.020795436	Uqcrb
ENSMUSG0C 664.8937689	-0.488737948	0.177859586	-2.747886466	0.005998077	0.020795436	Dmx1
ENSMUSG0C 1.482235577	-2.909208534	1.058844155	-2.747532316	0.006004559	0.020811833	NA
ENSMUSG0C 30.58314017	-0.900977879	0.327992376	-2.746947624	0.006015274	0.02084593	NA
ENSMUSG0C 1354.748261	-0.880403235	0.320509806	-2.746883929	0.006016442	0.020846937	Zadh2
ENSMUSG0C 4.900687439	-1.846779323	0.672414792	-2.746488246	0.006023704	0.020869057	NA
ENSMUSG0C 2.851102697	-2.668995567	0.971934248	-2.746065972	0.006031463	0.020889845	Serpina1d
ENSMUSG0C 15852.82721	-1.263614467	0.460243807	-2.745532795	0.006041273	0.020914059	Ckmt1
ENSMUSG0C 347.4984362	-2.174231367	0.792119881	-2.744826153	0.006054296	0.02095365	Sst
ENSMUSG0C 22.19981052	-2.198590553	0.801046487	-2.744647893	0.006057585	0.020961981	Cd160
ENSMUSG0C 4.223164543	-1.987842451	0.724393797	-2.744146153	0.006066852	0.020981822	NA
ENSMUSG0C 37.46647751	-1.600331524	0.583190755	-2.74409618	0.006067776	0.020981962	Qprt
ENSMUSG0C 10.52798682	-1.80648748	0.658632053	-2.742787073	0.006092017	0.021056593	NA
ENSMUSG0C 30.51855753	-0.910726489	0.332122894	-2.74213704	0.006104087	0.021095241	NA
ENSMUSG0C 90.66685241	-2.010139645	0.733079767	-2.742047642	0.006105748	0.021097914	NA
ENSMUSG0C 513.0005866	-0.806397784	0.294128785	-2.741648643	0.006113169	0.021117177	Uvssa
ENSMUSG0C 363.8833252	-0.851063648	0.310439093	-2.741483489	0.006116243	0.02112189	Spsb2
ENSMUSG0C 65.40747641	-0.961502035	0.350806959	-2.740829424	0.006128431	0.021154754	NA
ENSMUSG0C 7.384539539	-1.853400537	0.67638664	-2.740149533	0.006141124	0.021195487	Tmem215
ENSMUSG0C 764.43269	-0.470584118	0.171750591	-2.739927212	0.006145279	0.021206748	Tead3
ENSMUSG0C 1217.709838	-0.81304893	0.296854869	-2.738876856	0.006164946	0.021271526	Naa35
ENSMUSG0C 117.0596735	-1.784366901	0.651524293	-2.73875728	0.006167189	0.021276174	NA
ENSMUSG0C 27.73894481	-1.014828645	0.370975709	-2.735566296	0.006227304	0.021461749	Atrip
ENSMUSG0C 1609.705564	-0.772097998	0.282284353	-2.735178168	0.006234652	0.02148084	Mapre2
ENSMUSG0C 558.3918889	-0.596845725	0.218273808	-2.734390033	0.006249597	0.021522966	Sirt1
ENSMUSG0C 32.53109441	-1.3151438	0.480989109	-2.734248607	0.006252282	0.021529092	E130102H24Rik
ENSMUSG0C 51.52949917	-1.667397022	0.610150035	-2.732765592	0.006280501	0.021616863	Vstm2l
ENSMUSG0C 25.74890306	-1.27318747	0.465988931	-2.732226852	0.006290781	0.021645972	Smpx
ENSMUSG0C 4465.74006	-0.91713913	0.3357061	-2.731970401	0.006295568	0.021653419	Rnase4

ENSMUSG0C 4.043298906	-2.262601543	0.828334405	-2.731507383	0.006304533	0.021675862	NA
ENSMUSG0C 1686.332736	-1.31111458	0.480064518	-2.731121611	0.006311918	0.021696703	Pnp2
ENSMUSG0C 55.35887407	-0.844474394	0.309336165	-2.729956883	0.006334261	0.021767207	Snx29
ENSMUSG0C 2.813346736	-2.399058564	0.878989005	-2.729338535	0.006346152	0.021798609	Oprm1
ENSMUSG0C 5811.826068	-1.906163059	0.698455416	-2.729112004	0.006350513	0.021810436	H2-Q2
ENSMUSG0C 9.024061165	-1.452175276	0.532164228	-2.728810393	0.006356324	0.021827238	NA
ENSMUSG0C 964.6944663	-0.805567376	0.295240307	-2.728514217	0.006362035	0.021843691	4833420G17Rik
ENSMUSG0C 1006.299791	-0.610321213	0.223745313	-2.727749707	0.006376797	0.02188805	Szt2
ENSMUSG0C 100.017405	-1.789470849	0.656168358	-2.727151998	0.00638836	0.021921405	Rbp7
ENSMUSG0C 259.8171349	-0.793332223	0.290901111	-2.727154321	0.006388315	0.021921405	Fbxw17
ENSMUSG0C 26.78646357	-1.092429131	0.400601201	-2.726974177	0.006391804	0.021930055	Zfp712
ENSMUSG0C 5.212158779	-1.976476271	0.725228815	-2.72531404	0.006424035	0.022024734	Epha8
ENSMUSG0C 1030.422068	-0.774257733	0.284124913	-2.725061049	0.00642896	0.022034211	Baz2b
ENSMUSG0C 55.81593044	-1.500798976	0.550746036	-2.7250291	0.006429582	0.022034211	2310016G11Rik
ENSMUSG0C 8.591714135	-1.704347685	0.625515067	-2.724710843	0.006435782	0.022049098	D830026i12Rik
ENSMUSG0C 19.46671814	-1.318235182	0.483942711	-2.723948833	0.00645065	0.022096848	Zfp92
ENSMUSG0C 341.3725185	-0.997462516	0.366287807	-2.723166037	0.006465955	0.022142891	Fas
ENSMUSG0C 548.4858416	-0.554102147	0.203774618	-2.719191194	0.006544177	0.022381726	Rps6kb2
ENSMUSG0C 19.28889749	-1.8010523	0.662394898	-2.719000866	0.006547944	0.022388162	Htr4
ENSMUSG0C 231.0292738	-0.479073816	0.176193465	-2.719021488	0.006547535	0.022388162	Bloc1s5
ENSMUSG0C 5.574843222	-1.968401434	0.724030303	-2.718672721	0.006554443	0.022403933	NA
ENSMUSG0C 1704.311082	-1.59852646	0.220198737	-2.718119407	0.006565414	0.022434979	Usp33
ENSMUSG0C 18.80014231	-1.335883586	0.491595741	-2.717443368	0.006578841	0.022467935	NA
ENSMUSG0C 15.41649934	-1.861121293	0.68487797	-2.717449495	0.006578719	0.022467935	NA
ENSMUSG0C 1849.563195	-0.506715955	0.186501933	-2.716947477	0.006588706	0.022495158	Tbc1d10b
ENSMUSG0C 14908.02747	-0.653503753	0.240675269	-2.715292497	0.006621726	0.022598149	Ctnna1
ENSMUSG0C 6.63551381	-1.824820629	0.67208987	-2.715143778	0.0066247	0.022605053	Gabbr1
ENSMUSG0C 2739.41122	-0.694730704	0.255987435	-2.713925014	0.006649122	0.022681868	Acp5
ENSMUSG0C 1121.68012	-0.52144321	0.192155753	-2.713648701	0.006654669	0.022694276	Cnih4
ENSMUSG0C 460.927556	-0.713850773	0.263077383	-2.713463104	0.006658398	0.022703733	Gggs1
ENSMUSG0C 33.64784486	-1.106673942	0.407958806	-2.712710023	0.006673548	0.022752124	Zfp955a
ENSMUSG0C 237.2763716	-1.359327466	0.501361368	-2.711272854	0.006702545	0.022841149	Vav3
ENSMUSG0C 2.455346315	-2.567103393	0.946916453	-2.711013612	0.006707787	0.022855736	NA
ENSMUSG0C 7.913310194	-1.576457614	0.581529367	-2.710882209	0.006710446	0.022861517	NA
ENSMUSG0C 16973.73814	-0.717091975	0.264579166	-2.71031157	0.006722003	0.022891041	Tkt
ENSMUSG0C 25846.09428	-2.020627588	0.745597151	-2.710079543	0.006726707	0.022900496	Cyp3a13
ENSMUSG0C 34.87659469	-1.084234488	0.400072146	-2.710097413	0.006726345	0.022900496	NA
ENSMUSG0C 1128.934842	-0.641352139	0.23672985	-2.709215333	0.006744255	0.022943796	Ranbp10
ENSMUSG0C 2431.875136	-0.614981163	0.227005384	-2.709103868	0.006746522	0.02294822	Nktr
ENSMUSG0C 206.8502923	-0.802249226	0.296262923	-2.707896139	0.006771121	0.023015417	Tubb3
ENSMUSG0C 620.811911	-0.800790751	0.295766445	-2.707510487	0.006778993	0.023035582	Ankrd12
ENSMUSG0C 4776.382034	-1.903242355	0.702968787	-2.707435083	0.006780533	0.02303752	Sult1b1
ENSMUSG0C 5.985265208	-1.696475611	0.626867647	-2.706273993	0.006804288	0.023108315	NA
ENSMUSG0C 3.204448932	-2.729595966	1.008710838	-2.706024227	0.006809408	0.023122397	NA
ENSMUSG0C 10.14019892	-1.92738301	0.712321819	-2.705775619	0.006814507	0.023136406	Adamts13
ENSMUSG0C 507.1833946	-0.695243027	0.257033607	-2.704872083	0.00683307	0.023186174	Snta1
ENSMUSG0C 2918.138096	-0.774540335	0.286401977	-2.70438194	0.006843158	0.02321709	Slc35b1
ENSMUSG0C 123.9375859	-1.207122551	0.446528685	-2.703348274	0.006864478	0.023269483	Hoxb4
ENSMUSG0C 88.19574086	-0.997147533	0.368897828	-2.703045278	0.006870739	0.023287383	Serac1
ENSMUSG0C 528.3076649	-0.747046022	0.276418983	-2.702585812	0.006880242	0.023316267	Eno3
ENSMUSG0C 71.44755857	-1.137809642	0.421286579	-2.70079727	0.006917349	0.023431989	Pgbd5
ENSMUSG0C 55.09190059	-2.023697681	0.749398057	-2.700430914	0.006924972	0.023454467	Ugt1a6a
ENSMUSG0C 82.01023491	-1.205416253	0.446773146	-2.698049925	0.006974698	0.023606967	Cxhc4
ENSMUSG0C 3.494150693	-2.126550438	0.788214393	-2.697934034	0.006977126	0.023606967	NA
ENSMUSG0C 3879.609664	-0.576091456	0.213561005	-2.697549843	0.006985183	0.023625731	Vps4b
ENSMUSG0C 607.0769021	-3.05097353	1.131485293	-2.696432334	0.007008664	0.023684276	Car1
ENSMUSG0C 268.9385357	-0.7416538	0.275050573	-2.696427031	0.007008775	0.023684276	Fam83d
ENSMUSG0C 1289.472125	-0.828841541	0.307455624	-2.695808679	0.007021798	0.023714792	Fam20a
ENSMUSG0C 2773.934001	-1.345590819	0.499208142	-2.695450465	0.007029353	0.023733441	Got1
ENSMUSG0C 784.3306596	-0.378847685	0.140553172	-2.695404739	0.007030318	0.023733441	Pias1
ENSMUSG0C 6150.491456	-1.076624428	0.399429479	-2.695405532	0.007030301	0.023733441	Sidt2
ENSMUSG0C 497.6281709	-0.89108138	0.330706458	-2.694478315	0.007049891	0.023789378	Chm
ENSMUSG0C 958.7970913	-0.981901568	0.364597239	-2.693113014	0.007078827	0.023874995	Ptpn21
ENSMUSG0C 36.00364677	-0.829754529	0.308099175	-2.693141028	0.007078232	0.023874995	NA
ENSMUSG0C 874.4275951	-0.527458576	0.195875358	-2.69282763	0.007084889	0.023890506	Tmcc1
ENSMUSG0C 26.9287851	-1.885586509	0.700347216	-2.692359542	0.007094841	0.023920671	Sorcs3
ENSMUSG0C 112.9818487	-0.959179749	0.356289451	-2.692136257	0.007099593	0.0239299	Lrrc29

ENSMUSG0C 109.7977638	-1.014220861	0.376784729	-2.691778048	0.007107223	0.02394882	Otud1
ENSMUSG0C 1.839266673	-2.709557839	1.006868908	-2.691073106	0.007122259	0.023989278	Cyct
ENSMUSG0C 1010.957026	-1.206651143	0.44840886	-2.690961868	0.007124634	0.023993876	Rarres2
ENSMUSG0C 284.1028474	-0.869999783	0.323452899	-2.689726342	0.007151063	0.024069235	Slc38a9
ENSMUSG0C 6.336824287	-1.72072535	0.639993917	-2.688658915	0.007173968	0.024129234	Sftpb
ENSMUSG0C 1360.768427	-0.476312395	0.177166261	-2.688505085	0.007177274	0.024136938	Usf3
ENSMUSG0C 3340.75743	-0.447112	0.166331315	-2.688080708	0.007186402	0.024164215	Tbc1d20
ENSMUSG0C 2886.812277	-0.726065793	0.270130524	-2.687833202	0.007191731	0.024172477	Tjp1
ENSMUSG0C 835.2203021	-0.488904783	0.18192864	-2.687343686	0.00720228	0.024197055	Tnrc6b
ENSMUSG0C 29.23129496	-1.806597688	0.672242722	-2.687418738	0.007200662	0.024197055	NA
ENSMUSG0C 221.4395781	-0.907588356	0.337761298	-2.687070308	0.007208178	0.024213444	Mturn
ENSMUSG0C 12.62576019	-1.468151303	0.564627669	-2.686817277	0.00721364	0.024228367	NA
ENSMUSG0C 2434.599926	-0.487355614	0.181430796	-2.68617911	0.007227433	0.024271262	Ski
ENSMUSG0C 14.79637539	-1.523915433	0.567360747	-2.68597262	0.007231901	0.024279402	6820408C15Rik
ENSMUSG0C 4.146917779	-2.110155163	0.785734664	-2.685582372	0.007240353	0.02430434	Cmtm5
ENSMUSG0C 547.677652	-1.052734588	0.392006106	-2.685505587	0.007242016	0.024306491	Dhfr
ENSMUSG0C 17.13458793	-2.040736637	0.759924437	-2.685446785	0.007243291	0.024307334	Syce3
ENSMUSG0C 80.57303557	-1.077091327	0.401104376	-2.685314326	0.007246162	0.024313536	Apba1
ENSMUSG0C 1631.050152	-0.606678014	0.225934043	-2.685199653	0.007248649	0.024318445	Usp15
ENSMUSG0C 416.9240075	-0.607555724	0.226275284	-2.68502911	0.007252349	0.024327422	Dnajb5
ENSMUSG0C 416.4619664	-0.809480477	0.301692128	-2.683134234	0.007293571	0.024458679	Pitx2
ENSMUSG0C 467.2496986	-1.353744174	0.504564454	-2.68299553	0.007296597	0.02446203	Ugt2b35
ENSMUSG0C 32.69738266	-0.839640818	0.312959321	-2.682907208	0.007298524	0.024465039	NA
ENSMUSG0C 5.220511462	-2.142776404	0.798723399	-2.68275151	0.007301922	0.024472978	NA
ENSMUSG0C 28.74126092	-1.351997081	0.504210007	-2.681416598	0.007331119	0.024560436	NA
ENSMUSG0C 544.8128166	-0.749190557	0.279524776	-2.680229527	0.007357169	0.024630343	Scrn2
ENSMUSG0C 20.97264879	-1.371871567	0.511880218	-2.680063654	0.007360816	0.02463908	Nrg2
ENSMUSG0C 25.64422959	-1.050358009	0.392245214	-2.677809628	0.007410532	0.024788033	Sh3gl3
ENSMUSG0C 6020.139666	-0.754613593	0.281821154	-2.677632902	0.007414443	0.024794132	Adipor2
ENSMUSG0C 18.16301383	-1.922100531	0.717831472	-2.677648731	0.007414093	0.024794132	NA
ENSMUSG0C 4.287518597	-1.957785911	0.731250873	-2.677310871	0.007421574	0.024814484	Ace3
ENSMUSG0C 3.487699255	-2.079784249	0.776855866	-2.677181623	0.007424438	0.024820566	NA
ENSMUSG0C 6.949229569	-1.635993083	0.611460557	-2.675549657	0.007460682	0.024927702	Otp
ENSMUSG0C 8.368452812	-1.555367759	0.581476834	-2.674857651	0.007476099	0.024972188	Gm35507
ENSMUSG0C 14.49090245	-1.573004543	0.588092076	-2.674758948	0.0074783	0.024973545	NA
ENSMUSG0C 2479.678096	-0.959521691	0.358751182	-2.67461611	0.007481486	0.024979647	Smpdl3a
ENSMUSG0C 1008.790165	-0.559312335	0.209154185	-2.674162777	0.007491608	0.025006412	Gripap1
ENSMUSG0C 168.1893226	-0.772542789	0.28890534	-2.674034305	0.007494478	0.02501248	NA
ENSMUSG0C 3815.709932	-0.923262548	0.345373218	-2.673231447	0.00751244	0.025068903	B3gnt3
ENSMUSG0C 16.38009752	-1.939528017	0.725664914	-2.672759811	0.007523009	0.025097123	NA
ENSMUSG0C 225.475389	-0.788356387	0.295040395	-2.672028646	0.007539421	0.025140689	2310001H17Rik
ENSMUSG0C 4.727168998	-1.891786361	0.707997623	-2.672023604	0.007539534	0.025140689	NA
ENSMUSG0C 2.447831594	-2.527416157	0.946224391	-2.671053695	0.007561355	0.025203809	Slc4a10
ENSMUSG0C 2962.478251	-0.537733403	0.20133505	-2.670838499	0.007566204	0.025216434	Snx3
ENSMUSG0C 1082.07659	-0.542445895	0.20310961	-2.670705217	0.007569209	0.025220807	Snap29
ENSMUSG0C 957.2366888	-0.634846247	0.237709046	-2.670686115	0.007569639	0.025220807	Marveld1
ENSMUSG0C 180.3830791	-0.851102814	0.318747288	-2.670149193	0.007581755	0.025247011	Meis1
ENSMUSG0C 17117.91103	-0.420206876	0.157381771	-2.669984419	0.007585477	0.025255863	Arhgdia
ENSMUSG0C 21.75760387	-2.088846065	0.78238921	-2.669829847	0.007588969	0.025263951	Hoxc9
ENSMUSG0C 227.5107964	-1.215839972	0.455455323	-2.669504361	0.007596329	0.025284907	Atp1b2
ENSMUSG0C 122.9074743	-1.715336953	0.642591552	-2.669404769	0.007598582	0.025288864	Ces2b
ENSMUSG0C 21.03397157	-1.416475761	0.530797302	-2.668581313	0.007617234	0.025341397	NA
ENSMUSG0C 22.22965218	-1.054154548	0.395075199	-2.66823772	0.007625029	0.025349823	Tas1r3
ENSMUSG0C 3333.681965	-1.534370267	0.575081063	-2.668093883	0.007628294	0.025349823	Gcnt3
ENSMUSG0C 54.67471188	-1.656872251	0.620998244	-2.6680788	0.007628636	0.025349823	Tmem255a
ENSMUSG0C 953.9210196	-0.627228989	0.23505898	-2.668389825	0.007621577	0.025349823	Nhlrc3
ENSMUSG0C 24.76596934	-1.856281358	0.69573139	-2.668100629	0.007628141	0.025349823	NA
ENSMUSG0C 71.43988991	-0.691966631	0.259375268	-2.667820404	0.007634506	0.025365778	NA
ENSMUSG0C 3250.117683	-0.572008999	0.214486441	-2.666877205	0.007655964	0.025426405	Fam134c
ENSMUSG0C 35.32718088	-1.374820938	0.515645597	-2.666212892	0.00767111	0.025462468	NA
ENSMUSG0C 1369.573595	-0.461717666	0.17317785	-2.66614216	0.007672724	0.025464268	Herc1
ENSMUSG0C 6929.165632	-1.090799111	0.409156065	-2.66597322	0.007676581	0.025473509	Gsdmd
ENSMUSG0C 307.8226682	-0.892765928	0.33494077	-2.665444183	0.007688669	0.025502936	Homer1
ENSMUSG0C 2.251809278	-2.486308867	0.93308007	-2.664625414	0.007707412	0.025545487	Ms4a5
ENSMUSG0C 5.052853025	-1.902998601	0.714177436	-2.664601966	0.007707949	0.025545487	Luzp2
ENSMUSG0C 1.926703061	-2.942583205	1.104437891	-2.664326558	0.007714264	0.025559281	NA
ENSMUSG0C 2.064201758	-2.744379803	1.030111606	-2.664157735	0.007718136	0.025567654	Paupar

ENSMUSG0C 47.23733642	-1.688535048	0.633949712	-2.663515759	0.007732879	0.025610243	Rnase6
ENSMUSG0C 84.55845305	-1.28764613	0.483720236	-2.661964572	0.007768605	0.025714225	Celf5
ENSMUSG0C 6324.24934	-1.396148959	0.524534951	-2.661689095	0.007774966	0.025728107	Ati2
ENSMUSG0C 1.388820489	-2.836081366	1.065650988	-2.661360425	0.00778256	0.025749651	NA
ENSMUSG0C 2.713585467	-2.582241918	0.970317004	-2.661235358	0.007785452	0.025755631	Rxrg
ENSMUSG0C 744.2495613	-0.983920281	0.369771346	-2.660888391	0.007793479	0.025778596	Wipf3
ENSMUSG0C 7.742838596	-1.464184552	0.550380873	-2.660311475	0.007806842	0.025819203	NA
ENSMUSG0C 6.845157454	-1.777202221	0.668338553	-2.659134677	0.007834164	0.025898055	Dleu7
ENSMUSG0C 344.6092083	-0.53487186	0.201200496	-2.658402299	0.007851211	0.025933345	Pdik1l
ENSMUSG0C 12.34848564	-1.298040946	0.488487761	-2.65726401	0.007877772	0.02601395	NA
ENSMUSG0C 122.1999996	-1.891146332	0.711718976	-2.657153168	0.007880363	0.026018889	Cd7
ENSMUSG0C 897.8121982	-0.605683355	0.227979786	-2.656741481	0.007889992	0.026043418	Nagk
ENSMUSG0C 1366.082149	-0.825413514	0.310683272	-2.656768446	0.007889361	0.026043418	Mkrrn2os
ENSMUSG0C 17.24220745	-1.258762915	0.473862846	-2.656386598	0.007898301	0.026058894	Cdk5r2
ENSMUSG0C 11.36469316	-1.448344321	0.545443259	-2.655352863	0.007922549	0.026129122	Tmem52
ENSMUSG0C 198.8377259	-1.747657338	0.658194337	-2.655229983	0.007925435	0.026135015	Cyp2e1
ENSMUSG0C 291.7781729	-0.742343679	0.279661429	-2.654437127	0.007944084	0.026192875	NA
ENSMUSG0C 1964.711685	-0.561469518	0.211592676	-2.653539471	0.007965245	0.026255359	Dpp8
ENSMUSG0C 1.789309932	-2.675287202	1.008189003	-2.653557213	0.007964827	0.026255359	Olfr685
ENSMUSG0C 820.822841	-0.678320613	0.255659843	-2.653215325	0.007972899	0.026274528	Rbsn
ENSMUSG0C 1835.872929	-0.675121192	0.254459254	-2.653160301	0.007974199	0.026274528	Kctd12
ENSMUSG0C 274.3923654	-0.549232477	0.207015785	-2.653094668	0.00797575	0.0262754	Dact3
ENSMUSG0C 14.66364633	-1.087586028	0.410033603	-2.652431459	0.007991435	0.026312478	4732471J01Rik
ENSMUSG0C 688.454606	-0.917743386	0.346076166	-2.651853769	0.00800512	0.026353886	Tmem161b
ENSMUSG0C 988.5258642	-0.616251064	0.232507866	-2.650452534	0.008038402	0.026456121	Arhgef18
ENSMUSG0C 1244.557366	-0.454780259	0.171601789	-2.650206973	0.008044247	0.026471692	Kat6a
ENSMUSG0C 2.345538315	-2.967120452	1.119697448	-2.64993053	0.008050832	0.026489692	NA
ENSMUSG0C 10.11863602	-1.426095252	0.538285132	-2.649330565	0.00806514	0.02652942	NA
ENSMUSG0C 3.272114104	-2.049430634	0.773711588	-2.648830217	0.00807709	0.026565048	NA
ENSMUSG0C 718.3652739	-1.174987483	0.443687395	-2.648232732	0.00809138	0.026604682	NA
ENSMUSG0C 537.9904523	-1.054686089	0.398652395	-2.645628378	0.008153934	0.026788115	Arntl
ENSMUSG0C 27.60399843	-1.294528249	0.489517917	-2.644496154	0.008181264	0.026866754	Nefl
ENSMUSG0C 1548.363268	-1.444007176	0.54630705	-2.643215342	0.008212279	0.026961151	Fbxo32
ENSMUSG0C 12577.52419	-1.88705046	0.713994086	-2.642949706	0.008218724	0.026978584	Alpi
ENSMUSG0C 7.905693595	-1.923306863	0.727863978	-2.642398745	0.008232108	0.027003885	Akr1cl
ENSMUSG0C 3.268222864	-2.214076029	0.837903935	-2.642398414	0.008232116	0.027003885	NA
ENSMUSG0C 1457.049892	-0.673802151	0.255032922	-2.642020275	0.008241312	0.027026854	Rala
ENSMUSG0C 1725.878996	-0.57859152	0.219063022	-2.641210341	0.008261041	0.027076338	Mier1
ENSMUSG0C 29.86360142	-1.554269741	0.588486611	-2.641130167	0.008262997	0.02707901	Mybpc2
ENSMUSG0C 378.7548656	-2.13879276	0.810036836	-2.640364815	0.008281683	0.027132761	Mfsd4b2
ENSMUSG0C 544.005063	-0.754647019	0.285885493	-2.639682797	0.008298366	0.02717243	Sesn2
ENSMUSG0C 2.384290243	-2.501247501	0.947551387	-2.639695889	0.008298045	0.02717243	NA
ENSMUSG0C 4.08991459	-2.098207775	0.794995737	-2.639269216	0.008308497	0.027198107	NA
ENSMUSG0C 5.590677955	-1.853562015	0.702489198	-2.638563012	0.008325823	0.027247312	Il17b
ENSMUSG0C 402.6654894	-1.178379803	0.446724412	-2.637822718	0.008344019	0.027295582	Hif3a
ENSMUSG0C 12.37131458	-1.268587871	0.481294462	-2.635783227	0.008394334	0.027445058	St6galnac5
ENSMUSG0C 1764.19577	-1.439832744	0.546413376	-2.635061307	0.008412209	0.027492149	Nr1d1
ENSMUSG0C 240.5481905	-1.599461998	0.607023062	-2.634927891	0.008415516	0.027499174	NA
ENSMUSG0C 28.91416648	-0.831382376	0.315681996	-2.633607199	0.008448316	0.027594968	Olfr1336
ENSMUSG0C 8.932981724	-1.326917542	0.503994805	-2.632800038	0.008468419	0.027653025	NA
ENSMUSG0C 1442.232162	-0.722674979	0.274585689	-2.631874161	0.008491531	0.027720875	Ranbp9
ENSMUSG0C 80.40010011	-1.322752218	0.502615295	-2.631738886	0.008494912	0.027728103	Gm5431
ENSMUSG0C 1674.697466	-0.672832701	0.255709873	-2.631234742	0.008507525	0.027761644	Zfp384
ENSMUSG0C 3532.427372	-0.819602097	0.311538046	-2.630825052	0.008517787	0.027784574	Map2k3
ENSMUSG0C 1580.741314	-0.571062915	0.217066994	-2.630814129	0.008518061	0.027784574	Zmynd11
ENSMUSG0C 3598.165184	-0.491552878	0.186838726	-2.630893973	0.00851606	0.027784574	Hnrrnpul1
ENSMUSG0C 350.5449357	-0.455089013	0.173112105	-2.628868799	0.008566941	0.027932506	Zfp715
ENSMUSG0C 4.015646233	-2.101968691	0.799712358	-2.628405913	0.008578608	0.027954724	Aard
ENSMUSG0C 25.76950582	-1.135126277	0.431875424	-2.628365064	0.008579639	0.027954724	Stamos
ENSMUSG0C 55.28608914	-1.006624609	0.382998902	-2.628270219	0.008582031	0.027954852	Add2
ENSMUSG0C 27.39950598	-1.777981936	0.676475828	-2.628300766	0.008581261	0.027954852	Htr1d
ENSMUSG0C 2605.082908	-0.82615103	0.314350571	-2.628120026	0.008585822	0.027963364	Tmem120a
ENSMUSG0C 34272.91254	-1.906608327	0.725566437	-2.627751549	0.008595127	0.027982161	Aldob
ENSMUSG0C 4.403668539	-2.016274893	0.767367449	-2.627522051	0.008600927	0.027997207	Hist1h2br
ENSMUSG0C 11.32398191	-1.472674252	0.560540716	-2.62723868	0.008608093	0.028012857	Micalcl
ENSMUSG0C 102.0603727	-1.098531632	0.418185708	-2.626899034	0.00861669	0.028029314	Cmah
ENSMUSG0C 1249.712302	-0.83354354	0.317306168	-2.626937712	0.00861571	0.028029314	Stk40



ENSMUSG0C 14.9534314	-1.264745322	0.481542066	-2.626448264	0.008628111	0.028054147	Olf1r1484
ENSMUSG0C 54.99585997	-1.167812472	0.444655644	-2.626330031	0.008631109	0.028057008	NA
ENSMUSG0C 1118.575524	-1.171388448	0.446110108	-2.62578325	0.008644985	0.028086742	Aldh1a7
ENSMUSG0C 116.557875	-1.160628956	0.44227168	-2.624244345	0.008684146	0.028198547	Rgs9
ENSMUSG0C 6052.830808	-1.860501696	0.70962293	-2.621817329	0.00874623	0.028376868	Ephx2
ENSMUSG0C 4823.47775	-0.542972748	0.207306198	-2.619182408	0.00881408	0.028565797	Dnajc5
ENSMUSG0C 518.7051808	-1.165457859	0.444992612	-2.619049905	0.008817505	0.0285691	Far2
ENSMUSG0C 67.1295686	-1.000974717	0.382349449	-2.617957784	0.008845775	0.028641165	Wasf3
ENSMUSG0C 5.124353855	-1.731363504	0.661452309	-2.617518269	0.008857175	0.028674168	NA
ENSMUSG0C 49.00388868	-1.820922835	0.695860334	-2.61679355	0.008876001	0.028723372	NA
ENSMUSG0C 1430.745655	-0.675353805	0.258137085	-2.616260294	0.008889876	0.028752606	Map4k3
ENSMUSG0C 439.5225657	-2.200078127	0.84106759	-2.615816081	0.008901449	0.028778283	Cd79a
ENSMUSG0C 20.90790025	-1.181020193	0.451527383	-2.615611453	0.008906785	0.028791615	NA
ENSMUSG0C 2039.735352	-0.511502495	0.195587575	-2.615209557	0.008917273	0.028821596	Spg7
ENSMUSG0C 62.10347285	-0.718491045	0.274895477	-2.613688128	0.008957076	0.028933758	Olf1r731
ENSMUSG0C 8.901149312	-1.33290062	0.50997232	-2.613672483	0.008957486	0.028933758	NA
ENSMUSG0C 1421.122694	-0.491307069	0.187987534	-2.613508767	0.008961778	0.028941817	Stam2
ENSMUSG0C 273.6392092	-2.660521832	1.018589717	-2.611966121	0.009002317	0.029052989	Car3
ENSMUSG0C 120.5374221	-0.948717363	0.363252359	-2.611730769	0.009008517	0.029069047	Tchh
ENSMUSG0C 4633.472524	-0.48828065	0.186981391	-2.611386339	0.009017596	0.029094392	Arfgef1
ENSMUSG0C 3606.303764	-1.308060978	0.501078072	-2.610493358	0.009041173	0.02915858	Oit1
ENSMUSG0C 7342.39834	-0.651640068	0.249706407	-2.609624944	0.009064154	0.029220795	Flnb
ENSMUSG0C 517.7771877	-1.338828959	0.513183014	-2.608872315	0.009084113	0.029276829	Hdhd3
ENSMUSG0C 1665.225212	-0.624688509	0.239480337	-2.608516914	0.009093552	0.029297877	Tmem41b
ENSMUSG0C 2879.794023	-0.845652921	0.324231166	-2.608179012	0.009102534	0.029318253	Fam46a
ENSMUSG0C 1761.810567	-0.762100887	0.292198606	-2.608160583	0.009103024	0.029318253	Sphk2
ENSMUSG0C 60.59760917	-1.260491907	0.483522289	-2.606895145	0.009136733	0.029418845	Syn1
ENSMUSG0C 301.1672379	-0.744861508	0.285763397	-2.606567242	0.009145487	0.029443038	Tspan17
ENSMUSG0C 13.72938172	-2.047628811	0.785761931	-2.605915012	0.009162919	0.029491168	4933440M02Rik
ENSMUSG0C 1007.686299	-1.765445815	0.677718404	-2.604984317	0.009187847	0.029563386	2610528A11Rik
ENSMUSG0C 478.4557463	-0.706705953	0.271315034	-2.604743066	0.009194318	0.029580203	Rcor3
ENSMUSG0C 2773.868994	-0.646647522	0.248275543	-2.604555872	0.009199342	0.029584347	Stx12
ENSMUSG0C 969.9712254	-0.671621272	0.257862038	-2.604575988	0.009198802	0.029584347	Tyk2
ENSMUSG0C 231.4295112	-0.87328737	0.33536214	-2.604012995	0.009213926	0.029622209	Cbfa2t3
ENSMUSG0C 542.9220552	-0.725507896	0.278621405	-2.60392017	0.009216422	0.029622209	Mtmt9
ENSMUSG0C 1122.964182	-0.614224386	0.235905366	-2.603689764	0.00922262	0.029631127	Clasrp
ENSMUSG0C 3136.722341	-0.611405729	0.235079219	-2.600849751	0.009299317	0.029825109	Ctnd1
ENSMUSG0C 3386.983255	-1.430530117	0.55000522	-2.600939162	0.009296894	0.029825109	Pklr
ENSMUSG0C 483.6962802	-0.38311926	0.147314093	-2.600696596	0.009303469	0.029834398	Cfap97
ENSMUSG0C 25.6068168	-1.066118718	0.410035792	-2.600062575	0.009320676	0.029877477	Golga7b
ENSMUSG0C 1707.807047	-0.56148213	0.216213338	-2.596889415	0.00940722	0.030124176	Fbrs
ENSMUSG0C 3648.082855	-0.639424455	0.246229007	-2.59686892	0.009407782	0.030124176	Atxn713b
ENSMUSG0C 87.6407635	-0.921554621	0.355023871	-2.595753964	0.009438362	0.030213952	Bend4
ENSMUSG0C 587.1787294	-0.571920222	0.220435895	-2.594496789	0.00947295	0.030296095	Psg16
ENSMUSG0C 2.328528153	-2.462003902	0.948922947	-2.594524572	0.009472184	0.030296095	4930570G19Rik
ENSMUSG0C 1306.756515	-0.484647766	0.186828535	-2.594077863	0.0094845	0.030324871	Ercc3
ENSMUSG0C 1217.125593	-0.914580514	0.352727058	-2.592884479	0.009517473	0.030409831	Tmem219
ENSMUSG0C 7.321872294	-1.479669024	0.570755447	-2.592474643	0.009528821	0.030433808	NA
ENSMUSG0C 1898.59368	-0.909215498	0.350743293	-2.59225341	0.009534951	0.030441109	Efnb2
ENSMUSG0C 441.6941607	-0.479890201	0.185121437	-2.592299456	0.009533675	0.030441109	Dffa
ENSMUSG0C 1115.614592	-1.06359157	0.41029382	-2.592268075	0.009534544	0.030441109	Apobec1
ENSMUSG0C 5.711693787	-2.080695858	0.802769914	-2.591895662	0.009544871	0.030460749	Slc38a8
ENSMUSG0C 3477.34572	-0.830572807	0.320469299	-2.591739086	0.009549216	0.030470273	Mgat5
ENSMUSG0C 2.324956744	-2.461172926	0.949755788	-2.591374496	0.00955934	0.030490291	NA
ENSMUSG0C 1100.645498	-0.8338278	0.321780862	-2.591290837	0.009561665	0.030491269	Mavs
ENSMUSG0C 912.6852238	-0.493856912	0.19063774	-2.590551655	0.009582224	0.030542776	Mkl1
ENSMUSG0C 4466.733708	-0.50602578	0.195351599	-2.590333448	0.009588301	0.030558045	Fam20b
ENSMUSG0C 17.46590907	-1.449419437	0.55958719	-2.59015836	0.009593179	0.030565392	NA
ENSMUSG0C 7782.859556	-0.41201279	0.159079646	-2.589978044	0.009598205	0.030577305	Tcf25
ENSMUSG0C 123.5441223	-0.95900113	0.370438257	-2.58882853	0.009630303	0.030667224	Zfp970
ENSMUSG0C 2.539787307	-2.553625011	0.986531533	-2.588487975	0.009639831	0.03069345	Fam135b
ENSMUSG0C 46.18772089	-1.115493318	0.430957819	-2.58840487	0.009642158	0.030696743	Cldn34c1
ENSMUSG0C 15.21376641	-1.371785582	0.530077019	-2.58789861	0.00965634	0.030737774	NA
ENSMUSG0C 3.139577293	-2.250274351	0.869812435	-2.587079997	0.009679312	0.030802643	Klrb1f
ENSMUSG0C 2858.465218	-0.887982457	0.343354092	-2.586200303	0.009704052	0.030864836	Cdc42ep5
ENSMUSG0C 12.86952908	-1.294028727	0.500446905	-2.585746287	0.009716843	0.03090138	A630020A06
ENSMUSG0C 1084.775652	-1.272694882	0.492276292	-2.585326377	0.009728686	0.030930763	Evpl



ENSMUSG0C 1325.244766	-0.792440695	0.306634431	-2.584317404	0.009757195	0.03100066	Osbpl7
ENSMUSG0C 7.726895772	-1.994507338	0.771788741	-2.584265916	0.009758652	0.031001143	Gm156
ENSMUSG0C 3619.529977	-0.747650006	0.28932109	-2.584153146	0.009761844	0.031007135	Gpd2
ENSMUSG0C 450.5191355	-0.61707342	0.238838726	-2.583640563	0.009776362	0.031044948	Ogfod1
ENSMUSG0C 5.569030162	-2.081727956	0.806226524	-2.582063345	0.009821156	0.03114845	NA
ENSMUSG0C 363.3089146	-0.706336051	0.273612088	-2.581523562	0.009836528	0.03118598	Dyrk1b
ENSMUSG0C 1307.201201	-0.787824336	0.305199347	-2.581343454	0.009841662	0.031198093	Prkag2
ENSMUSG0C 54.99554506	-1.982826161	0.768196627	-2.581144406	0.009847348	0.031211954	NA
ENSMUSG0C 3373.519812	-0.805358728	0.312034062	-2.580996198	0.009851567	0.031219078	Pnrc1
ENSMUSG0C 1472.835591	-0.495500453	0.191998611	-2.580750201	0.009858589	0.031235081	Aak1
ENSMUSG0C 384.091262	-0.861941335	0.334000883	-2.580655861	0.009861283	0.031239451	Hand2
ENSMUSG0C 13.29867763	-1.195686547	0.463352358	-2.580512489	0.009865379	0.031242592	NA
ENSMUSG0C 3.445362978	-2.037626857	0.789632019	-2.580476487	0.009866407	0.031242592	NA
ENSMUSG0C 10.6688554	-2.065047723	0.800415164	-2.579970766	0.009880868	0.031276469	NA
ENSMUSG0C 59.48363718	-1.070668849	0.415011986	-2.579850426	0.009884312	0.031283201	Hecw2
ENSMUSG0C 290.2426407	-0.844482238	0.327356979	-2.579698286	0.009888667	0.031290797	Syde2
ENSMUSG0C 327.6899874	-0.775256134	0.300541671	-2.579529588	0.009893498	0.031299766	Zfp53
ENSMUSG0C 9785.797622	-0.567452225	0.21999949	-2.579334269	0.009899095	0.031313301	Myl12b
ENSMUSG0C 2566.908998	-0.791231872	0.306881663	-2.578296347	0.009928881	0.031394981	Prkab1
ENSMUSG0C 14.27339184	-1.135926758	0.440602875	-2.578119256	0.009933971	0.031406895	Gm10030
ENSMUSG0C 108.9839212	-1.148912641	0.44565338	-2.578040899	0.009936224	0.031409838	Kcnma1
ENSMUSG0C 4.680957268	-2.763225347	1.07225146	-2.577031087	0.009965299	0.031489178	Defa-ps1
ENSMUSG0C 3.609895678	-2.137219284	0.829489632	-2.576547316	0.009979255	0.03152489	Klrb1
ENSMUSG0C 893.0486234	-0.523592186	0.203283955	-2.57566903	0.010004636	0.031584071	Usp38
ENSMUSG0C 399.8262425	-0.911265507	0.353863966	-2.575185928	0.010018622	0.03162402	Cdc14b
ENSMUSG0C 57.64159574	-1.873530497	0.727685775	-2.57464219	0.010034383	0.031656947	NA
ENSMUSG0C 778.9771629	-0.629666026	0.244685359	-2.573370266	0.01007134	0.031752455	Pold4
ENSMUSG0C 568.2266502	-0.856547578	0.332847011	-2.573397237	0.010070555	0.031752455	Hace1
ENSMUSG0C 4398.132379	-0.738659187	0.287063417	-2.573156808	0.010077554	0.03176783	Malat1
ENSMUSG0C 25.94344361	-1.413235524	0.549380496	-2.572416628	0.010099128	0.031827391	Olfr628
ENSMUSG0C 1.575650664	-2.804482666	1.090415783	-2.571938806	0.010113077	0.031858672	Hoxd3
ENSMUSG0C 3950.593382	-0.521985417	0.202967729	-2.571765567	0.010118138	0.031866166	Chmp3
ENSMUSG0C 1008.358685	-0.748299136	0.290980645	-2.571645739	0.01012164	0.031868746	Kifc3
ENSMUSG0C 479.9779741	-0.936378598	0.364111308	-2.571682278	0.010120572	0.031868746	Itga1
ENSMUSG0C 1343.586732	-1.0342388	0.402192938	-2.571499153	0.010125926	0.031878016	Samd8
ENSMUSG0C 2131.49115	-1.190458591	0.463104101	-2.570606886	0.010152049	0.031943322	Pard6b
ENSMUSG0C 97.16777854	-0.677651992	0.263645564	-2.57031441	0.010160625	0.031966072	Plp1
ENSMUSG0C 28.9167794	-1.261839735	0.491335825	-2.568181824	0.010223352	0.032142131	NA
ENSMUSG0C 762.4022365	-0.529423941	0.206308084	-2.566181269	0.010282508	0.032315287	Pex7
ENSMUSG0C 59.41289643	-1.967452786	0.766954706	-2.565278979	0.010309288	0.032395164	NA
ENSMUSG0C 4044.179144	-0.834661861	0.325575712	-2.563649041	0.010357822	0.032526163	Tes
ENSMUSG0C 1416.36217	-0.678437399	0.264724717	-2.562803377	0.010383083	0.032592564	Fam83g
ENSMUSG0C 6.311455553	-1.675488181	0.653795401	-2.562710258	0.010385868	0.032596999	NA
ENSMUSG0C 11427.15464	-0.674293233	0.263151703	-2.562374571	0.010395913	0.032624215	Dazap2
ENSMUSG0C 27.54648634	-1.252942422	0.489005515	-2.562225545	0.010400375	0.032633908	Cav3
ENSMUSG0C 1124.754886	-1.836114575	0.716778965	-2.561618945	0.010418556	0.032686637	Ms4a18
ENSMUSG0C 3.554037137	-2.653272504	1.03599384	-2.561089072	0.01043446	0.032723569	NA
ENSMUSG0C 33.77149701	-1.27173314	0.49659204	-2.560921315	0.0104395	0.032735052	Ntrk2
ENSMUSG0C 346.5652526	-0.581881854	0.227233284	-2.560724569	0.010445413	0.032749272	Zbtb11
ENSMUSG0C 76.53270485	-1.110196325	0.433631293	-2.560231109	0.010460258	0.032791486	Rdh5
ENSMUSG0C 1198.505325	-0.741126803	0.289508941	-2.559944433	0.01046889	0.032814217	Acox3
ENSMUSG0C 6.66087793	-1.67204559	0.653244608	-2.559601058	0.010479238	0.03284232	Prmt8
ENSMUSG0C 187.6597319	-0.54755184	0.213941831	-2.55934914	0.010486836	0.032857462	NA
ENSMUSG0C 10.38279926	-1.446095898	0.565017165	-2.559384009	0.010485784	0.032857462	NA
ENSMUSG0C 4430.228179	-0.660470755	0.258126172	-2.558712859	0.010506048	0.032913316	Nomo1
ENSMUSG0C 684.1058214	-0.587788752	0.229741111	-2.55848311	0.010512993	0.032922048	Cobll1
ENSMUSG0C 308.8914539	-1.212256136	0.473809231	-2.558532117	0.010511511	0.032922048	Batf2
ENSMUSG0C 35.54237525	-1.307301547	0.510988458	-2.558377839	0.010516176	0.032927676	Begain
ENSMUSG0C 897.4918594	-0.886164497	0.346395392	-2.558245627	0.010520176	0.032935858	1700025G04Rik
ENSMUSG0C 8.688038824	-1.592490382	0.622637667	-2.557651852	0.010538154	0.032987795	NA
ENSMUSG0C 6506.533311	-0.771500643	0.301679742	-2.557349847	0.010547308	0.033007753	Map2k2
ENSMUSG0C 6967.263154	-0.637918565	0.249453584	-2.557263583	0.010549924	0.033011592	Arcn1
ENSMUSG0C 5.022210495	-2.10036346	0.821700985	-2.556116516	0.010584767	0.03309994	Fam162b
ENSMUSG0C 6146.19251	-1.152742584	0.450997158	-2.555986361	0.010588727	0.033106843	Errfi1
ENSMUSG0C 2.173604324	-2.395866782	0.937595215	-2.555331708	0.010608665	0.033151728	Lingo2
ENSMUSG0C 1.29897681	-2.746682153	1.074920286	-2.555242643	0.01061138	0.033155851	NA
ENSMUSG0C 211.3906299	-0.824986005	0.322886911	-2.555030811	0.01061784	0.033171673	Zfp182

ENSMUSG0C 5.755463529	-1.923650428	0.753144696	-2.554157837	0.010644499	0.033241847	Col17a1
ENSMUSG0C 9532.497304	-1.047266323	0.410126033	-2.553523155	0.010663919	0.033283882	Tgfb1
ENSMUSG0C 5.481594381	-2.053620592	0.804241022	-2.553488987	0.010664965	0.033283882	Ctcflos
ENSMUSG0C 9.482050284	-1.275036497	0.499540876	-2.552416747	0.010697847	0.033364587	A430078I02Rik
ENSMUSG0C 2911.605711	-1.193188986	0.467486331	-2.552350535	0.010699881	0.033366549	Chka
ENSMUSG0C 92.46261589	-1.077382435	0.422222218	-2.551695269	0.010720023	0.033411818	ATP6
ENSMUSG0C 27.4174177	-0.927428657	0.363522348	-2.551228725	0.010734385	0.033447804	NA
ENSMUSG0C 5.92292523	-1.535384718	0.601846968	-2.551121463	0.01073769	0.033452426	Gm16907
ENSMUSG0C 512.9081511	-0.784715354	0.307644775	-2.550718937	0.010750098	0.033479199	Lrif1
ENSMUSG0C 1871.070891	-0.594552164	0.233109996	-2.550521956	0.010756175	0.033493733	Dcaf15
ENSMUSG0C 292.9460263	-0.881281791	0.345598649	-2.550015147	0.010771824	0.033533672	Akt3
ENSMUSG0C 5342.349328	-0.99042693	0.388427152	-2.549839588	0.010777249	0.033546166	Phyh
ENSMUSG0C 12.89246387	-1.164709335	0.456989455	-2.548656918	0.010813863	0.033638093	Ccdc129
ENSMUSG0C 257.0616617	-0.733528153	0.287826928	-2.548504267	0.010818596	0.033648412	Plcxd2
ENSMUSG0C 18.29449952	-1.685618483	0.661871417	-2.546746148	0.01087325	0.033796274	Arhgap27os3
ENSMUSG0C 1448.024171	-1.19612703	0.469734179	-2.54639131	0.01088431	0.033826226	Fam234b
ENSMUSG0C 31.40535403	-1.003049366	0.393941037	-2.546191615	0.010890539	0.033841157	Slc35f1
ENSMUSG0C 346.9284215	-0.50477593	0.198315956	-2.545311732	0.010918022	0.033907254	Tdrd3
ENSMUSG0C 1653.191123	-0.842623422	0.331053048	-2.545282175	0.010918946	0.033907254	Fam129a
ENSMUSG0C 3276.887018	-0.580591074	0.228195227	-2.544273526	0.01095053	0.033996443	Ankrd11
ENSMUSG0C 2051.621535	-1.394761617	0.548222972	-2.544150259	0.010954395	0.033999557	Fahd1
ENSMUSG0C 1.470441352	-2.767948178	1.088423759	-2.543079526	0.010988022	0.034090563	Rdh19
ENSMUSG0C 134.6132873	-1.148301888	0.451728204	-2.542019468	0.011021403	0.034180739	Lonrf3
ENSMUSG0C 1273.668784	-0.417113701	0.164125307	-2.541434392	0.011039866	0.034206739	Mul1
ENSMUSG0C 35.66308146	-2.189047587	0.861370923	-2.541353009	0.011042437	0.034210241	Fcrla
ENSMUSG0C 93.16232004	-1.912533635	0.752607862	-2.541208684	0.011046996	0.034219904	Dnaaf1
ENSMUSG0C 3.663931574	-1.969916063	0.775556426	-2.540003533	0.011085135	0.034302262	NA
ENSMUSG0C 1771.597888	-0.46401751	0.182688732	-2.539935029	0.011087306	0.034304513	Hmg20b
ENSMUSG0C 4.013548796	-2.208100327	0.870057132	-2.537879692	0.011152632	0.034497645	Gm29571
ENSMUSG0C 1985.991726	-0.616008793	0.242742913	-2.537700425	0.011158345	0.034510826	Chd2
ENSMUSG0C 18.76711817	-1.320178069	0.52025627	-2.537553405	0.011163033	0.034516338	NA
ENSMUSG0C 1.685015756	-2.582859068	1.017896	-2.537448883	0.011166367	0.034522153	NA
ENSMUSG0C 43.53084084	-0.870633639	0.343168332	-2.537045406	0.011179245	0.034552973	Camk4
ENSMUSG0C 42.75392595	-2.107571757	0.83090599	-2.536474383	0.011197493	0.034600371	NA
ENSMUSG0C 1280.825967	-0.58253863	0.229735766	-2.535689759	0.011222611	0.034658045	Gnaq
ENSMUSG0C 450.7223992	-0.672811507	0.265352376	-2.535539784	0.011227417	0.034665782	Nudt7
ENSMUSG0C 15.05895874	-1.366604724	0.539172961	-2.534631415	0.01125657	0.034733221	NA
ENSMUSG0C 27.58074275	-0.883383903	0.348549213	-2.534459613	0.011262091	0.034745744	1700034H15Rik
ENSMUSG0C 748.8498137	-0.66670653	0.263151549	-2.533545911	0.011291495	0.034806137	Gpr137
ENSMUSG0C 7.19835166	-1.710545743	0.675123048	-2.533679968	0.011287176	0.034806137	NA
ENSMUSG0C 667.0094435	-0.612729966	0.241866335	-2.533341258	0.01129809	0.034816115	RbmX
ENSMUSG0C 17.07477655	-1.092526188	0.431310752	-2.533037221	0.011307894	0.03483702	Cln1
ENSMUSG0C 43.07291665	-0.969801912	0.3828797	-2.53291546	0.011311823	0.03483702	Ddo
ENSMUSG0C 2.919997949	-2.139544108	0.844677211	-2.532972454	0.011309984	0.03483702	Olfir270
ENSMUSG0C 389.2554686	-1.63377474	0.645129014	-2.532477542	0.011325962	0.034874863	Gal
ENSMUSG0C 3549.029424	-0.371731768	0.146794766	-2.532323038	0.011330955	0.034881192	Usp47
ENSMUSG0C 4.125295445	-1.89453938	0.748135257	-2.532348747	0.011330124	0.034881192	NA
ENSMUSG0C 3210.694932	-0.640040089	0.252897046	-2.530832605	0.011379214	0.035007072	Vps35
ENSMUSG0C 38.90152634	-1.127877496	0.445931368	-2.529262519	0.01143025	0.035145873	1110020A21Rik
ENSMUSG0C 361.8204979	-0.492662521	0.194803426	-2.529023902	0.011438024	0.035160674	Sik2
ENSMUSG0C 59.42650983	-1.375804249	0.544237923	-2.527946307	0.01147319	0.035255089	Fez1
ENSMUSG0C 2276.807589	-0.462657211	0.183031524	-2.527746048	0.011479735	0.035266875	Rassf3
ENSMUSG0C 10.78705945	-2.120405735	0.83890833	-2.5275774	0.01148525	0.03527846	NA
ENSMUSG0C 15.37890642	-1.903505619	0.753589576	-2.525918192	0.011539635	0.035422608	NA
ENSMUSG0C 61.63642894	-1.479928421	0.585940186	-2.525732925	0.011545722	0.035436714	Dnhd1
ENSMUSG0C 485.4075382	-0.511808109	0.202642306	-2.525672549	0.011547706	0.035438225	Cdkn2aip
ENSMUSG0C 4.36346993	-2.012286497	0.797176907	-2.52426592	0.011594019	0.035561977	Il31ra
ENSMUSG0C 211.9721648	-0.964662406	0.382336865	-2.5230693	0.011633547	0.035664802	Pcsk4
ENSMUSG0C 24875.22951	-1.463722376	0.580150668	-2.523003864	0.011635712	0.035666836	Lyz1
ENSMUSG0C 189.2347659	-0.987482038	0.391445338	-2.522656275	0.011647219	0.0356975	Tmod1
ENSMUSG0C 4.603284688	-2.056900578	0.815581917	-2.52200366	0.011668849	0.03574996	NA
ENSMUSG0C 17.1545996	-1.5191304	0.602424929	-2.521692456	0.011679177	0.035772373	NA
ENSMUSG0C 13.14635766	-1.317737332	0.522595722	-2.521523381	0.011684791	0.035784955	Pdcd1lg2
ENSMUSG0C 21066.47558	-2.471535963	0.980367732	-2.521029489	0.011701205	0.035830603	Pck1
ENSMUSG0C 25.95716336	-1.609968913	0.638836971	-2.520156137	0.011730279	0.035905747	Gpr22
ENSMUSG0C 535.5635185	-0.72476953	0.287618858	-2.519895721	0.011738961	0.035923064	Daglb
ENSMUSG0C 3.711639833	-2.161543172	0.857954869	-2.519413609	0.011755048	0.035967662	Topaz1

ENSMUSG0C 1.751455603	-2.580143086	1.024731113	-2.517873277	0.011806579	0.036106732	4932415M13Rik
ENSMUSG0C 3153.734489	-0.461951155	0.183482707	-2.517682256	0.011812984	0.036111265	Gsk3a
ENSMUSG0C 253.5533938	-0.902410906	0.358430428	-2.517673823	0.011813266	0.036111265	Zfp948
ENSMUSG0C 3307.143094	-1.883186211	0.748179735	-2.517023816	0.011835083	0.036156665	Clec2e
ENSMUSG0C 540.6049943	-1.03278548	0.410544987	-2.515645088	0.011881476	0.036279736	Cytip
ENSMUSG0C 3.663958399	-1.932722005	0.768301076	-2.515578939	0.011883706	0.036281882	Psg29
ENSMUSG0C 40.90639954	-1.463721373	0.58189769	-2.515427365	0.011888817	0.036292822	Kcns3
ENSMUSG0C 846.5869856	-0.613592004	0.24396336	-2.515099005	0.011899896	0.036321975	Rhot2
ENSMUSG0C 597.8701543	-1.091996154	0.434261836	-2.514603091	0.011916646	0.036363755	B3gnt7
ENSMUSG0C 883.9345203	-0.442665119	0.176067104	-2.514184126	0.011930813	0.03640231	Fbxo42
ENSMUSG0C 14.91821255	-1.190726665	0.473754545	-2.513383094	0.01195794	0.03647571	1700108F19Rik
ENSMUSG0C 467.9285077	-0.513664605	0.204519423	-2.511568816	0.012019585	0.036649629	Wdr37
ENSMUSG0C 12.93134125	-1.307360559	0.520771875	-2.510428503	0.012058474	0.03674934	Cyp2ab1
ENSMUSG0C 3.681546231	-1.927211243	0.768010337	-2.509355866	0.012095156	0.036837505	Olfir1233
ENSMUSG0C 557.961309	-0.982571577	0.391865196	-2.507422418	0.012161528	0.037006436	Sh3bp5
ENSMUSG0C 23.2413152	-1.61209743	0.643063513	-2.506902346	0.012179436	0.037056182	Gm15638
ENSMUSG0C 6.265389089	-1.719681885	0.686241064	-2.505944304	0.012212486	0.037149768	Fam217a
ENSMUSG0C 2052.107199	-0.452780711	0.180687683	-2.505874799	0.012214886	0.037149768	Dcaf12
ENSMUSG0C 1549.973581	-0.67411805	0.269010965	-2.505912912	0.01221357	0.037149768	Pcsk7
ENSMUSG0C 4.364793354	-1.776225331	0.70898081	-2.505322156	0.012233991	0.037203108	NA
ENSMUSG0C 1.343358651	-2.716700943	1.084994167	-2.503885299	0.012283785	0.037335414	NA
ENSMUSG0C 140.1974351	-1.919031116	0.767385212	-2.500740289	0.012393403	0.037634881	Aqp3
ENSMUSG0C 2023.068082	-0.472699975	0.189044325	-2.500471653	0.012402806	0.037658622	Ppp5c
ENSMUSG0C 1281.647552	-0.540931171	0.216343758	-2.500331761	0.012407705	0.037668683	Arnt
ENSMUSG0C 22.94236107	-1.372026588	0.548827193	-2.499924578	0.012421975	0.037697552	Adgrb3
ENSMUSG0C 158.9254984	-1.004673365	0.40205331	-2.498856095	0.012459489	0.037802471	Tshz3
ENSMUSG0C 1282.982558	-0.631788067	0.252831605	-2.498849254	0.01245973	0.037802471	Strn
ENSMUSG0C 12.321855	-1.604973789	0.642415439	-2.498342492	0.012477558	0.037846893	NA
ENSMUSG0C 466.4396242	-0.547849309	0.219377151	-2.497294302	0.012514505	0.037949269	Atxn7l1
ENSMUSG0C 2.93694481	-2.289337897	0.916999987	-2.496551721	0.012540738	0.038014262	Olfir689
ENSMUSG0C 3.483010374	-2.057213495	0.824181287	-2.496069164	0.012557811	0.038056304	NA
ENSMUSG0C 2390.269104	-0.598886551	0.239941282	-2.495971293	0.012561277	0.03806195	Eif2ak1
ENSMUSG0C 1509.332627	-0.397212898	0.159155874	-2.495747652	0.012569198	0.038081096	Stk4
ENSMUSG0C 3.57275632	-2.483579628	0.995146128	-2.495693404	0.01257112	0.038082063	NA
ENSMUSG0C 3.991101335	-2.183746728	0.875037208	-2.495604425	0.012574274	0.038086759	Casp14
ENSMUSG0C 5078.406654	-1.158456216	0.464226774	-2.49545326	0.012579633	0.038098133	Xdh
ENSMUSG0C 2.593046344	-2.233403673	0.895157997	-2.494982652	0.012596329	0.038138974	NA
ENSMUSG0C 342.8200266	-0.737078861	0.295494788	-2.494388703	0.012617429	0.038197992	Mrps36
ENSMUSG0C 4372.029264	-0.977607305	0.391964535	-2.494121831	0.01262692	0.038221072	Gmds
ENSMUSG0C 45.76744646	-0.976005667	0.391328328	-2.494083859	0.012628271	0.038221072	Zfp85
ENSMUSG0C 344.9275376	-0.680959683	0.273097899	-2.493463648	0.012650354	0.038278156	Swt1
ENSMUSG0C 15.94690127	-1.272285811	0.510453713	-2.492460684	0.012686137	0.03837177	Glr3
ENSMUSG0C 10.67556093	-1.193274184	0.4787919	-2.49226059	0.012693287	0.038383621	Olfir63
ENSMUSG0C 107.4616189	-0.52108785	0.209081392	-2.492272729	0.012692853	0.038383621	NA
ENSMUSG0C 1986.334615	-0.34668968	0.139110619	-2.492187022	0.012695917	0.038386687	Necap2
ENSMUSG0C 5.723274826	-1.987215072	0.797848385	-2.490717673	0.012748538	0.038540884	Timd2
ENSMUSG0C 4317.178248	-0.376303252	0.15110728	-2.490305248	0.012763342	0.038580731	Ap2b1
ENSMUSG0C 2.38348525	-2.186355771	0.878120205	-2.489813761	0.012781005	0.038629205	Avpr2
ENSMUSG0C 3.217521201	-2.398150267	0.963374496	-2.489322977	0.012798664	0.038672737	Gm15850
ENSMUSG0C 2.960074574	-2.313635833	0.929445694	-2.489264137	0.012800782	0.038674219	Grip1os1
ENSMUSG0C 24.65726224	-1.928459749	0.775078279	-2.488083851	0.012843345	0.038778152	NA
ENSMUSG0C 904.0344354	-0.765869921	0.307900935	-2.487390695	0.012868399	0.038843925	Fam193b
ENSMUSG0C 8.426546678	-1.545994473	0.62155067	-2.487318488	0.012871012	0.038846875	NA
ENSMUSG0C 2.700408475	-2.233941531	0.898602838	-2.486016555	0.012918196	0.038973266	NA
ENSMUSG0C 3124.937761	-0.597282793	0.240303972	-2.485530256	0.012935859	0.039007904	AI314180
ENSMUSG0C 26.51563796	-1.151274874	0.463265662	-2.485128877	0.012950454	0.039046959	NA
ENSMUSG0C 4.597303174	-2.184075386	0.879007859	-2.484705186	0.012965876	0.039088497	NA
ENSMUSG0C 2.931636674	-2.099979384	0.846142793	-2.481826237	0.0130711	0.039370743	4932412D23Rik
ENSMUSG0C 158.7653452	-0.951207739	0.38343867	-2.48072981	0.013111372	0.039482031	Mterf2
ENSMUSG0C 6.978226228	-1.5268726	0.61557176	-2.480413657	0.013123004	0.039512052	NA
ENSMUSG0C 532.7468658	-1.183602786	0.477199432	-2.480310552	0.0131268	0.039513464	Tfpi
ENSMUSG0C 44.79192086	-0.819325442	0.330417042	-2.47967065	0.013150379	0.03957441	U2af14
ENSMUSG0C 18.0776684	-1.723089327	0.695044756	-2.479105572	0.013171231	0.039632144	NA
ENSMUSG0C 392.0760432	-0.614653326	0.248058749	-2.47785385	0.013217527	0.039756341	Senp7
ENSMUSG0C 1825.556739	-0.456259904	0.184247643	-2.476340524	0.013273691	0.039894965	Elf1
ENSMUSG0C 9.957174234	-1.467182387	0.592502261	-2.476247746	0.013277141	0.039900286	Klrb1a
ENSMUSG0C 3.407973504	-2.037750334	0.823252669	-2.475242911	0.013314558	0.039997553	NA

ENSMUSG0C 7.259193623	-1.580201306	0.638420475	-2.475173286	0.013317154	0.040000293	Hsf5
ENSMUSG0C 170.1211838	-0.610718472	0.246769911	-2.474849831	0.013329221	0.04002735	Tbc1d32
ENSMUSG0C 6.578100161	-1.878362398	0.759214742	-2.474085781	0.013357762	0.040101983	NA
ENSMUSG0C 580.9797189	-0.863891953	0.349306459	-2.473163413	0.013392289	0.04018025	Lin54
ENSMUSG0C 1369.486051	-0.869038155	0.351420649	-2.472928545	0.013401093	0.040201588	Tnfrsf21
ENSMUSG0C 1.95704656	-2.60249951	1.052468033	-2.472758724	0.013407463	0.040215617	NA
ENSMUSG0C 74.66089802	-0.946451877	0.382798801	-2.472452568	0.013418952	0.040239917	170002915Rik
ENSMUSG0C 3.039559865	-2.119754653	0.857430284	-2.472218082	0.013427758	0.04026124	NA
ENSMUSG0C 3.565616154	-2.0884481	0.844928747	-2.471744639	0.013445552	0.040309507	NA
ENSMUSG0C 11733.4564	-1.050517147	0.425082231	-2.47132689	0.013461271	0.040341358	Lgals2
ENSMUSG0C 4.868817584	-1.907703208	0.771965791	-2.471227651	0.013465007	0.040347466	5830418P13Rik
ENSMUSG0C 781.533526	-1.245106802	0.503917028	-2.470856774	0.013478979	0.040361367	Bco2
ENSMUSG0C 39.72737923	-0.944191468	0.382120945	-2.470923092	0.01347648	0.040361367	Rsl1
ENSMUSG0C 1305.921347	-0.546829396	0.221376098	-2.47013748	0.013506113	0.040434938	Papd5
ENSMUSG0C 673.8190215	-0.643209615	0.260526499	-2.468883655	0.013553528	0.040535056	Rffl
ENSMUSG0C 958.1575278	-1.422721236	0.576300148	-2.468715721	0.013559889	0.040539735	Fut4
ENSMUSG0C 603.8061203	-0.404981085	0.164058349	-2.46851859	0.01356736	0.040541662	Acot13
ENSMUSG0C 5809.122334	-1.028967328	0.416971535	-2.467715996	0.013597816	0.040612234	Mgst3
ENSMUSG0C 11.88988873	-1.719254135	0.696727842	-2.467612216	0.013601758	0.040612846	NA
ENSMUSG0C 554.4177355	-0.462135367	0.187307896	-2.467249789	0.013615534	0.040634501	Zfp994
ENSMUSG0C 93.18142251	-0.807994885	0.327551347	-2.466773201	0.013633668	0.040683509	Dhdh
ENSMUSG0C 1084.896501	-0.526703296	0.213534301	-2.466598081	0.013640337	0.040695795	Cstf2t
ENSMUSG0C 15.25944383	-1.070376369	0.434018434	-2.466200244	0.013655497	0.040717441	NA
ENSMUSG0C 19.854025	-1.247875231	0.505997323	-2.46616963	0.013656664	0.040717441	NA
ENSMUSG0C 11.30915333	-1.212089805	0.491572356	-2.465740373	0.01367304	0.040744699	Gm12018
ENSMUSG0C 6730.618396	-0.6016223	0.244022341	-2.465439424	0.013684531	0.040768714	Rps6ka1
ENSMUSG0C 1.586381605	-2.732331302	1.108296323	-2.46534365	0.01368819	0.0407745	Epha6
ENSMUSG0C 606.9948287	-0.559405041	0.226913865	-2.465274836	0.013690819	0.04077722	Pramef8
ENSMUSG0C 23.61182348	-0.88204816	0.35786242	-2.464768889	0.013710165	0.040804145	Gm42372
ENSMUSG0C 29.87823296	-0.91313348	0.370508088	-2.464543985	0.013718772	0.040819534	NA
ENSMUSG0C 4.859907293	-2.343517208	0.951067141	-2.464092288	0.013736074	0.040861455	NA
ENSMUSG0C 3.239745196	-1.979955802	0.803808686	-2.463217723	0.013769627	0.040950334	NA
ENSMUSG0C 1.845997809	-2.592389957	1.052734003	-2.462530849	0.01379603	0.041011518	Vmn2r26
ENSMUSG0C 3704.329357	-0.66714916	0.270941651	-2.462335182	0.01380356	0.041025569	Stk24
ENSMUSG0C 4.005612196	-1.881383608	0.764745251	-2.460144217	0.01388812	0.041261402	Tmem74
ENSMUSG0C 21.0877229	-1.181515841	0.480274352	-2.460085232	0.013890402	0.041263024	Rgs7
ENSMUSG0C 2714.931035	-0.836320167	0.340248312	-2.457970068	0.013972482	0.041485862	Spag9
ENSMUSG0C 741.9133014	-1.457229606	0.592891404	-2.457835613	0.013977714	0.041491262	Cst6
ENSMUSG0C 44.99029112	-1.089446245	0.443345565	-2.457329749	0.013997414	0.04153417	Gbgt1
ENSMUSG0C 9.996258751	-1.250175553	0.50903904	-2.455952204	0.014051184	0.041681029	Cadm2
ENSMUSG0C 55.96800556	-0.929190393	0.378414969	-2.455480013	0.014069658	0.041717272	St6galnac3
ENSMUSG0C 11.08115468	-1.166326158	0.474988033	-2.455485351	0.014069449	0.041717272	NA
ENSMUSG0C 10.56104881	-1.178624575	0.48003281	-2.455300034	0.014076704	0.041732958	NA
ENSMUSG0C 642.6853407	-0.534886277	0.217904762	-2.454679155	0.014101038	0.041789454	Traf3ip2
ENSMUSG0C 62.77611687	-1.061434015	0.43258483	-2.453701425	0.014139433	0.041887562	Crybb3
ENSMUSG0C 7.714887519	-1.706128328	0.695587203	-2.452788551	0.014175364	0.041982747	Olfrr60
ENSMUSG0C 242.1926914	-0.580235703	0.236586348	-2.452532483	0.014185457	0.042002956	Zrsl1
ENSMUSG0C 1.927577305	-2.759070462	1.125529073	-2.451354237	0.014231982	0.042131943	NA
ENSMUSG0C 277.4536809	-0.645375662	0.263318162	-2.450934855	0.014248574	0.04216882	Phldb3
ENSMUSG0C 27.2878104	-0.870084264	0.355019488	-2.450807046	0.014253634	0.042178541	Gpr162
ENSMUSG0C 7.421607717	-1.856976124	0.757836102	-2.450366402	0.014271091	0.042214424	NA
ENSMUSG0C 8.973547188	-1.29813123	0.529865557	-2.449925671	0.014288571	0.042255928	Lrrc39
ENSMUSG0C 121.8456856	-0.828434026	0.338345906	-2.448482492	0.01434594	0.042398875	Ric3
ENSMUSG0C 600.0588756	-1.000474565	0.408621534	-2.448413709	0.01434868	0.042401696	Rgs1
ENSMUSG0C 23.50537761	-0.929802645	0.379993897	-2.446888362	0.014409546	0.042560386	Rnf165
ENSMUSG0C 1.647365051	-2.537343307	1.037083388	-2.44661455	0.014420497	0.042587434	NA
ENSMUSG0C 7.219216942	-1.451021942	0.593195382	-2.446111326	0.01444064	0.042641622	NA
ENSMUSG0C 53.0387866	-0.681930387	0.278796793	-2.445976443	0.014446044	0.042652277	Zfp97
ENSMUSG0C 17.33713083	-1.132807064	0.463166586	-2.445787537	0.014453615	0.042669326	NA
ENSMUSG0C 1964.404099	-0.563094506	0.230291101	-2.445142278	0.014479501	0.042735125	Rtkn
ENSMUSG0C 4.976994099	-1.987382817	0.813114021	-2.444162523	0.014518884	0.042840718	NA
ENSMUSG0C 7.648369589	-1.419832764	0.581380684	-2.442173955	0.01459911	0.043056047	Mlip
ENSMUSG0C 4.474085887	-1.804439218	0.738994138	-2.44175038	0.014616249	0.043101243	Cyp3a57
ENSMUSG0C 5.820396823	-2.099020417	0.85983062	-2.441202218	0.014638455	0.043161368	NA
ENSMUSG0C 12604.69133	-0.504754204	0.206901377	-2.439588421	0.014704004	0.043317003	Cltc
ENSMUSG0C 419.9949189	-0.660929026	0.270948124	-2.439319442	0.014714954	0.043343887	Dip2c
ENSMUSG0C 11.12943788	-1.092415732	0.447851006	-2.439239204	0.014718222	0.043348138	NA



ENSMUSG0C 342.6036403	-0.720600489	0.295430772	-2.43915176	0.014721784	0.043353255	Zfr2
ENSMUSG0C 97.30534163	-1.089330349	0.446736273	-2.438419299	0.014751652	0.043425062	NA
ENSMUSG0C 89.2109529	-0.963733214	0.395321237	-2.437848323	0.014774972	0.043472162	NA
ENSMUSG0C 8862.967479	-2.00687031	0.82349668	-2.43701081	0.014809237	0.043556794	Apoc3
ENSMUSG0C 813.7775927	-0.603512151	0.247654142	-2.436915235	0.014813151	0.043562914	Scnn1a
ENSMUSG0C 2555.68373	-0.492517578	0.202133142	-2.436599823	0.014826077	0.043590133	Klhdc3
ENSMUSG0C 969.707354	-0.552331732	0.226733067	-2.436044019	0.014848877	0.043651767	Lmn2b
ENSMUSG0C 291.3896086	-0.502464663	0.206288938	-2.435732458	0.014861672	0.043683975	Sdccag8
ENSMUSG0C 1370.734255	-0.55345058	0.227258819	-2.435331586	0.014878149	0.043702402	Acb3
ENSMUSG0C 28.68035156	-1.081095672	0.443903322	-2.435430464	0.014874083	0.043702402	Zfyve28
ENSMUSG0C 710.414675	-0.720677212	0.295928157	-2.435311393	0.014878979	0.043702402	Mettl7a1
ENSMUSG0C 4.06427046	-1.855098574	0.76172413	-2.435394261	0.014875572	0.043702402	NA
ENSMUSG0C 7.400986144	-1.428192324	0.58647857	-2.435199506	0.014883581	0.043705472	Ndst3
ENSMUSG0C 1139.063605	-0.508777145	0.208932466	-2.435127265	0.014886553	0.043708435	Sirt2
ENSMUSG0C 8.885799546	-1.410636588	0.579298922	-2.435075459	0.014888684	0.043709292	U2af114
ENSMUSG0C 5.119338706	-1.604475721	0.658993862	-2.434735457	0.014902681	0.043744974	NA
ENSMUSG0C 6.001854021	-1.807302213	0.742368577	-2.434507964	0.014912052	0.043767074	Chrn3
ENSMUSG0C 2352.098474	-0.447931258	0.184058525	-2.433634945	0.014948062	0.043867346	Pef1
ENSMUSG0C 5.388463198	-1.752816245	0.720373132	-2.433206025	0.014965783	0.043906987	Olfr531
ENSMUSG0C 690.5331662	-0.555725252	0.228425392	-2.432852345	0.014980408	0.043935134	Tsc1
ENSMUSG0C 4893.472735	-0.497163375	0.204390323	-2.432421302	0.01499825	0.043978986	Rer1
ENSMUSG0C 850.3693195	-0.402812132	0.165617642	-2.4321813	0.015008193	0.043989467	Dcaf6
ENSMUSG0C 886.3124928	-0.449593202	0.184879888	-2.431812385	0.015023487	0.044023431	Fam177a
ENSMUSG0C 466.4474775	-0.82865884	0.340889221	-2.430874283	0.01506244	0.044132131	Gngt2
ENSMUSG0C 1474.36523	-0.716430447	0.294727862	-2.430820224	0.015064687	0.044133273	Tom1l1
ENSMUSG0C 1053.504027	-0.602753977	0.248000522	-2.430454469	0.015079901	0.044172394	Usp43
ENSMUSG0C 26.99954092	-1.332939788	0.548460012	-2.430331763	0.015085008	0.044181906	Fbln7
ENSMUSG0C 1591.118896	-0.39470353	0.1624234	-2.4300903	0.015095061	0.044205902	Hif1an
ENSMUSG0C 12.68060409	-1.369864473	0.563769256	-2.429831811	0.015105831	0.044231988	F730311O21Rik
ENSMUSG0C 1.626580018	-2.534227813	1.043269777	-2.429120318	0.015135509	0.044307966	Hoxd10
ENSMUSG0C 1210.492608	-0.560098074	0.230612557	-2.428740571	0.01515137	0.044343469	Psd4
ENSMUSG0C 15.6240666	-1.17561217	0.484083537	-2.428531606	0.015160104	0.044363565	Nlgn1
ENSMUSG0C 26.64204317	-0.87819837	0.361633732	-2.428419397	0.015164796	0.044371829	NA
ENSMUSG0C 1555.947365	-0.616629948	0.253967935	-2.427983465	0.015183035	0.044405827	Cdc25a
ENSMUSG0C 48.08072706	-1.196339357	0.492742827	-2.427918362	0.015185761	0.044405827	NA
ENSMUSG0C 5.755248501	-1.478614381	0.608997389	-2.427948639	0.015184493	0.044405827	NA
ENSMUSG0C 4.778789635	-1.623829765	0.66884342	-2.427817508	0.015189984	0.04441271	NA
ENSMUSG0C 971.0826419	-0.41686486	0.171752016	-2.42713227	0.015218706	0.044485737	Mfap3
ENSMUSG0C 1437.50815	-0.994696333	0.40984017	-2.427034748	0.015222798	0.044492222	Cldnd1
ENSMUSG0C 1.751872864	-2.71857947	1.120234229	-2.426795575	0.015232836	0.044509883	Tchhl1
ENSMUSG0C 638.9753932	-0.601976302	0.248186654	-2.425498277	0.015287388	0.044659026	Tmem159
ENSMUSG0C 463.9620164	-0.473730323	0.195333532	-2.425238095	0.01529835	0.044682166	Txlng
ENSMUSG0C 2373.571066	-0.814161614	0.335744584	-2.4249434	0.015310774	0.044705351	Sgpp2
ENSMUSG0C 304.4047341	-1.086373052	0.448099993	-2.424398728	0.015333759	0.044761463	Mcoln2
ENSMUSG0C 6.218813886	-1.515034614	0.624937088	-2.424299411	0.015337954	0.044768207	Glyat
ENSMUSG0C 724.2520459	-0.739303911	0.305102742	-2.423130996	0.015387377	0.044879377	Prkx
ENSMUSG0C 876.4147483	-0.427136689	0.176322371	-2.422475865	0.01541515	0.044943826	Cdc40
ENSMUSG0C 237.4633353	-0.565969311	0.233644681	-2.422350505	0.015420469	0.044953818	Zfyve16
ENSMUSG0C 505.3567131	-1.244871485	0.513951887	-2.422155688	0.015428739	0.044972408	Lyve1
ENSMUSG0C 78.13664951	-0.703302157	0.29041676	-2.421699624	0.015448114	0.045012313	Zfp595
ENSMUSG0C 51.76151041	-0.875723154	0.36161001	-2.421733716	0.015446665	0.045012313	NA
ENSMUSG0C 31.33654589	-1.210838201	0.500026499	-2.421548066	0.015454557	0.045025565	Gm35339
ENSMUSG0C 21.8980565	-0.949805342	0.392259644	-2.421369001	0.015462173	0.045042229	NA
ENSMUSG0C 73.67557656	-1.070898592	0.442600759	-2.41955887	0.015539345	0.045244844	Gpr171
ENSMUSG0C 4.919228333	-1.843737969	0.762075806	-2.419362949	0.015547718	0.045263676	Kcng3
ENSMUSG0C 95591.09527	-0.903489587	0.373506824	-2.418937297	0.015565923	0.045311122	ND1
ENSMUSG0C 1464.54029	-0.740025036	0.305953084	-2.418753313	0.015573798	0.045328491	Tfdp2
ENSMUSG0C 2.806921193	-2.656789172	1.098433436	-2.418707483	0.01557576	0.045328648	NA
ENSMUSG0C 479.4956257	-0.527537073	0.218118619	-2.418578824	0.015581269	0.045339127	Atg14
ENSMUSG0C 12759.71989	-0.8160848	0.337452026	-2.418372799	0.015590095	0.045354801	Mcl1
ENSMUSG0C 174.4805604	-1.064598944	0.440319122	-2.417789487	0.015615108	0.04541534	Pde1a
ENSMUSG0C 7.589004699	-1.275559077	0.527697179	-2.417217921	0.015639651	0.045475586	Slc38a11
ENSMUSG0C 834.0334918	-0.591190264	0.244583064	-2.417134917	0.015643218	0.045480392	Nhlrc2
ENSMUSG0C 228.7652782	-0.778683214	0.322177218	-2.416940647	0.015651569	0.045499103	Mapt
ENSMUSG0C 697.3676345	-0.525561268	0.217671345	-2.414471541	0.015758054	0.045781055	Trappc13
ENSMUSG0C 1216.430857	-0.770016712	0.318997967	-2.413860873	0.015784488	0.045844247	Dgcr6
ENSMUSG0C 2200.917416	-0.511355841	0.211843458	-2.41383825	0.015785468	0.045844247	Inpp1



ENSMUSG0C 547.7618771	-0.692159314	0.286747087	-2.413832073	0.015785736	0.045844247	Zc3h3
ENSMUSG0C 1072.795234	-1.04727459	0.434034741	-2.412881945	0.015826945	0.045958306	Flncl
ENSMUSG0C 2.829010601	-2.49242457	1.033005265	-2.412789803	0.015830946	0.045964307	NA
ENSMUSG0C 3811.045345	-1.747911128	0.724894612	-2.411262411	0.015897406	0.046129079	Cps1
ENSMUSG0C 2015.256575	-0.543654024	0.225536679	-2.410490512	0.015931086	0.046221162	Tbl1xr1
ENSMUSG0C 3744.928089	-0.516938302	0.214480092	-2.410192469	0.015944107	0.046247644	Pnp
ENSMUSG0C 2162.11284	-0.552266218	0.229136063	-2.410210822	0.015943305	0.046247644	Pnlsr
ENSMUSG0C 2168.187018	-0.48285408	0.200358769	-2.409947334	0.015954823	0.046273079	Deptor
ENSMUSG0C 2394.308774	-0.46707884	0.193833654	-2.409689086	0.01596612	0.046300189	Itfg1
ENSMUSG0C 981.6473127	-0.651479935	0.270398367	-2.409333833	0.015981672	0.046328322	Rp2
ENSMUSG0C 932.5524498	-0.517224723	0.214682184	-2.409257781	0.015985003	0.046332324	Tapbpl
ENSMUSG0C 683.1025186	-0.451143555	0.187267175	-2.409090412	0.015992336	0.04634227	Pde7a
ENSMUSG0C 54.67988552	-1.306143162	0.542237002	-2.408804928	0.01600485	0.046367222	Fam26e
ENSMUSG0C 44.8007417	-1.263260457	0.524513472	-2.408442346	0.016020757	0.04639633	NA
ENSMUSG0C 1316.113906	-0.563569217	0.234007124	-2.408342139	0.016025155	0.046397755	Gan
ENSMUSG0C 7.888937546	-1.316238281	0.546995341	-2.4063062	0.016114752	0.046623071	NA
ENSMUSG0C 4257.861702	-1.097108729	0.456020143	-2.405833924	0.016135598	0.046677699	Nbl1
ENSMUSG0C 1160.847795	-1.718177331	0.714248833	-2.405572474	0.016147149	0.046705426	Nat8
ENSMUSG0C 3489.543958	-0.461294615	0.191846772	-2.404495061	0.016194825	0.046826225	Jak1
ENSMUSG0C 489.6196551	-0.773699491	0.321855438	-2.403872665	0.016222423	0.046888901	Myo19
ENSMUSG0C 1591.475541	-0.447123896	0.186034814	-2.403442059	0.016241541	0.046938447	Ubn1
ENSMUSG0C 63.99390088	-0.920544788	0.383055742	-2.403161438	0.01625401	0.046963058	Tmie
ENSMUSG0C 248.9318283	-0.781169197	0.325066363	-2.403106832	0.016256437	0.04696436	Nexn
ENSMUSG0C 33.07409791	-1.279168274	0.532661134	-2.40146726	0.01632947	0.047163878	Olf905
ENSMUSG0C 2936.796207	-0.633181838	0.263713966	-2.401017464	0.016349556	0.047198938	Tnrc18
ENSMUSG0C 1863.785433	-1.36974703	0.570475588	-2.401061601	0.016347584	0.047198938	Pde3a
ENSMUSG0C 8.315546709	-1.601764855	0.667188225	-2.400769071	0.016360658	0.047225247	NA
ENSMUSG0C 532.4287914	-0.538987615	0.224661138	-2.399113711	0.01643481	0.047404729	Dnase1l1
ENSMUSG0C 15.65206478	-1.126348937	0.469604728	-2.398504253	0.016462185	0.047472162	Acss3
ENSMUSG0C 113.6562833	-0.974415335	0.406381121	-2.397786913	0.016494458	0.047542142	Bfsp1
ENSMUSG0C 477.5983096	-0.691071439	0.28821883	-2.397731747	0.016496942	0.047543534	Coq4
ENSMUSG0C 43.11248622	-1.462415962	0.610047587	-2.397216205	0.016520173	0.047598935	Gm16596
ENSMUSG0C 4.39272727	-1.761272483	0.734766362	-2.397051056	0.016527621	0.04761462	B230319C09Rik
ENSMUSG0C 1208.530231	-0.448195813	0.1870518	-2.396105317	0.016570328	0.047731869	Scyl2
ENSMUSG0C 3399.598985	-0.332690438	0.138971849	-2.393941215	0.01666842	0.047991151	Cdk16
ENSMUSG0C 180.0937493	-1.006769491	0.420669506	-2.393255218	0.01669962	0.04806933	Cacna1e
ENSMUSG0C 1542.710483	-0.540166677	0.225747422	-2.392792225	0.016720707	0.048112538	Taok2
ENSMUSG0C 1153.251622	-0.781257527	0.326661847	-2.391639961	0.016773287	0.048228784	Peak1
ENSMUSG0C 2.837659346	-2.040719265	0.853531664	-2.390912195	0.016806572	0.048312793	NA
ENSMUSG0C 19877.38966	-0.488663603	0.204389519	-2.390844727	0.01680966	0.048315825	Lamp1
ENSMUSG0C 1340.316889	-0.413926799	0.173170708	-2.390281846	0.016835448	0.048366537	Ash1l
ENSMUSG0C 3948.584108	-0.395820385	0.165604921	-2.390148696	0.016841553	0.048378225	Pxn
ENSMUSG0C 538.3457076	-1.132081748	0.473741331	-2.389662192	0.016863876	0.048422238	Ang
ENSMUSG0C 3.788335048	-1.792992135	0.75052713	-2.388977112	0.016895355	0.048485872	Pcdh11x
ENSMUSG0C 18.58596179	-1.143601359	0.478970403	-2.387624267	0.016957669	0.048652944	Zkscan2
ENSMUSG0C 101.7634187	-0.866039515	0.362819087	-2.386973416	0.01698772	0.04872151	Wdr5b
ENSMUSG0C 8.154021426	-1.421668329	0.595744176	-2.386373861	0.017015443	0.048783354	5033417F24Rik
ENSMUSG0C 16.65415193	-1.338336741	0.56089525	-2.386072519	0.017029393	0.048817455	Rnls
ENSMUSG0C 36.02638267	-0.890935034	0.373410976	-2.385936918	0.017035673	0.048829566	Dcst2
ENSMUSG0C 36.86997775	-1.702107593	0.713414415	-2.385860949	0.017039192	0.048833762	Cyp4a10
ENSMUSG0C 22.03515703	-1.877920125	0.787196709	-2.385579239	0.017052248	0.048865285	Gm826
ENSMUSG0C 2541.313965	-0.561761656	0.235495616	-2.385444219	0.017058509	0.04887733	Sbds
ENSMUSG0C 2057.716155	-0.485172542	0.203413321	-2.385156195	0.017071871	0.048909717	Ccdc6
ENSMUSG0C 110.9576124	-0.86543534	0.362948375	-2.384458506	0.017104277	0.04899074	Pkia
ENSMUSG0C 6.249559033	-1.44800678	0.607369613	-2.384061943	0.01712272	0.049037653	NA
ENSMUSG0C 3.975999689	-1.884170293	0.790393348	-2.383838754	0.017133108	0.049056491	NA
ENSMUSG0C 2.770139502	-2.028470678	0.850988471	-2.383664112	0.01714124	0.049072944	4933411K16Rik
ENSMUSG0C 6051.66686	-0.592811871	0.248761033	-2.383057599	0.017169508	0.049142027	Nckap1
ENSMUSG0C 1444.778247	-0.462511016	0.194120141	-2.382601892	0.017190774	0.049185117	Strbp
ENSMUSG0C 6481.175117	-1.267773472	0.532433677	-2.381091819	0.017261409	0.049381265	ATP8
ENSMUSG0C 293.4181795	-0.991107016	0.416302068	-2.380740072	0.017277899	0.049422488	Ptpn2
ENSMUSG0C 6.615612793	-1.415706837	0.595039016	-2.379183213	0.01735105	0.049619783	Olf1297
ENSMUSG0C 8.437287997	-1.354144968	0.56921816	-2.378956021	0.017361747	0.049644399	Bhmt
ENSMUSG0C 165.8299826	-0.559191404	0.235164673	-2.377871632	0.017412887	0.049778644	Polk
ENSMUSG0C 7.719975596	-1.365943393	0.574471766	-2.377738078	0.017419194	0.049788963	NA
ENSMUSG0C 1234.347033	-0.407871963	0.171544089	-2.377650937	0.017423311	0.049790469	Tspsyl1
ENSMUSG0C 502.2344017	-1.21139419	0.509755749	-2.376420849	0.017481511	0.049932763	Hoga1

ACCEPTED MANUSCRIPT

## Summary of identified tumor specific InDels

tumor #1322

Chr	Start	End	Func.ensGene	Gene.ensGene	ExonicFunc.ensGene	Func.refGene	Gene.refGene	ExonicFunc.refGene
chr8	26160970	26160970	exonic	ENSMUSG00000037214	frameshift insertion	exonic	Thap1	frameshift insertion
chr5	31200672	31200672	exonic	ENSMUSG00000043059	frameshift insertion	exonic	Zfp513	frameshift insertion
chr3	31116812	31116816	exonic	ENSMUSG00000027660	frameshift deletion	exonic	Skil	frameshift deletion
chr7	24628979	24628979	exonic	ENSMUSG00000074277	frameshift insertion	exonic	Phldb3	frameshift insertion
chr6	89146613	89146614	exonic	ENSMUSG00000072917	frameshift deletion	ncRNA_exonic	Gm1965	.
chr11	71123745	71123746	exonic	ENSMUSG00000069830	frameshift deletion	exonic	Nlrp1a	frameshift deletion
chr13	107889970	107889972	exonic	ENSMUSG00000032846	nonframeshift deletion	exonic	Zswim6	nonframeshift deletion
chr11	48838977	48838978	exonic	ENSMUSG00000040350	frameshift deletion	intronic	Trim7	.
chr11	71123884	71123884	exonic	ENSMUSG00000069830	frameshift insertion	exonic	Nlrp1a	frameshift insertion
chr17	23291181	23291181	exonic	ENSMUSG00000091945	frameshift deletion	exonic	Vmn2r114	frameshift deletion
chr5	122867321	122867321	exonic	ENSMUSG00000029474	nonframeshift insertion	exonic	Rnf34	nonframeshift insertion
chrX	21031220	21031220	exonic	ENSMUSG00000054737	frameshift insertion	exonic	Zfp182	frameshift insertion
chr11	71123927	71123927	exonic	ENSMUSG00000069830	frameshift insertion	exonic	Nlrp1a	frameshift insertion
chr14	47664243	47664243	exonic	ENSMUSG00000021843	frameshift insertion	exonic	Ktn1	frameshift insertion
chr16	32753234	32753370	exonic	ENSMUSG00000079620	frameshift deletion	exonic	Muc4	frameshift deletion
chr11	71123929	71123930	exonic	ENSMUSG00000069830	frameshift deletion	exonic	Nlrp1a	frameshift deletion
chr19	11511629	11511629	exonic	ENSMUSG00000058470	frameshift insertion	exonic	Gm8369	frameshift insertion
chr1	171356828	171356828	exonic	ENSMUSG00000006412	nonframeshift insertion	exonic	Pfdn2	nonframeshift insertion
chrX	21031213	21031220	exonic	ENSMUSG00000054737	frameshift deletion	exonic	Zfp182	frameshift deletion
chr3	31116816	31116816	exonic	ENSMUSG00000027660	frameshift insertion	exonic	Skil	frameshift insertion
chr19	21598334	21598334	exonic	ENSMUSG00000035171	stopgain	exonic	1110059E24Rik	stopgain
chr5	31200673	31200673	exonic	ENSMUSG00000043059	frameshift insertion	exonic	Zfp513	frameshift insertion
chr3	67594297	67594300	exonic	ENSMUSG00000027775	frameshift deletion	exonic	Mfsd1	frameshift deletion

tumor #1319

Chr	Start	End	Func.ensGene	Gene.ensGene	ExonicFunc.ensGene	Func.refGene	Gene.refGene	ExonicFunc.refGene
chr4	147512619	147512619	exonic	ENSMUSG00000078496	frameshift deletion	exonic	Zfp982	frameshift deletion
chr17	46412542	46412542	exonic	ENSMUSG00000015597	frameshift insertion	exonic	Zfp318	frameshift insertion
chr4	147512615	147512615	exonic	ENSMUSG00000078496	nonframeshift insertion	exonic	Zfp982	nonframeshift insertion
chr11	69943996	69943996	exonic	ENSMUSG00000018566	frameshift insertion	intronic	Slc2a4	.
chr4	147512607	147512608	exonic	ENSMUSG00000078496	frameshift deletion	exonic	Zfp982	frameshift deletion
chr4	147512614	147512615	exonic	ENSMUSG00000078496	frameshift deletion	exonic	Zfp982	frameshift deletion
chr11	71123751	71123751	exonic	ENSMUSG00000069830	frameshift insertion	exonic	Nlrp1a	frameshift insertion
chr11	69396516	69396520	exonic	ENSMUSG00000059278	frameshift deletion	exonic	Naa38	frameshift deletion
chr1	85610809	85610811	exonic	ENSMUSG00000070031	nonframeshift deletion	exonic	Sp140	nonframeshift deletion
chr12	29984922	29984923	exonic	ENSMUSG00000020674	frameshift deletion	exonic	Pxdn	frameshift deletion
chr4	147512603	147512603	exonic	ENSMUSG00000078496	frameshift insertion	exonic	Zfp982	frameshift insertion
chr5	123273734	123273734	exonic	ENSMUSG00000029442	frameshift deletion	intergenic	Psmc9,Bcl7a	.
chr8	26160970	26160970	exonic	ENSMUSG00000037214	frameshift insertion	exonic	Thap1	frameshift insertion
chr15	98849588	98849590	exonic	ENSMUSG00000048154	nonframeshift deletion	exonic	Kmt2d	nonframeshift deletion

tumor #1323

Chr	Start	End	Func.ensGene	Gene.ensGene	ExonicFunc.ensGene	Func.refGene	Gene.refGene	ExonicFunc.refGene
chr8	72467912	72467914	exonic	ENSMUSG000000052488	nonframeshift deletion	exonic	Cherp	nonframeshift deletion
chr7	84947480	84947480	exonic	ENSMUSG000000066372	frameshift insertion	exonic	Vmn2r65	frameshift insertion
chr6	45653991	45653998	exonic	ENSMUSG000000039419	frameshift deletion	exonic	Cntnap2	frameshift deletion
chr17	75348895	75348895	exonic	ENSMUSG000000001870	frameshift deletion	intronic	Ltbp1	.
chr3	107931484	107931485	exonic	ENSMUSG000000004035	frameshift deletion	intronic	Gstm7	.
chr3	67594300	67594300	exonic	ENSMUSG000000027775	frameshift insertion	exonic	Mfsd1	frameshift insertion
chr7	84947481	84947481	exonic	ENSMUSG000000066372	frameshift insertion	exonic	Vmn2r65	frameshift insertion
chr9	113975342	113975346	exonic	ENSMUSG000000009741	frameshift deletion	exonic	Ubp1	frameshift deletion
chr11	71122758	71122758	exonic	ENSMUSG000000069830	nonframeshift insertion	exonic	Nlrp1a	nonframeshift insertion
chr11	71123751	71123751	exonic	ENSMUSG000000069830	frameshift insertion	exonic	Nlrp1a	frameshift insertion
chr11	79559540	79559543	exonic	ENSMUSG000000020716	frameshift deletion	exonic	Nf1	frameshift deletion
chrX	164423410	164423411	exonic	ENSMUSG000000031381	frameshift deletion	intronic	Piga	.
chr7	24628979	24628979	exonic	ENSMUSG000000074277	frameshift insertion	exonic	Phldb3	frameshift insertion
chr11	79559543	79559543	exonic	ENSMUSG000000020716	frameshift insertion	exonic	Nf1	frameshift insertion
chr17	23346066	23346066	exonic	ENSMUSG000000091076	frameshift insertion	exonic	Vmn2r115	frameshift insertion
chr11	71123745	71123746	exonic	ENSMUSG000000069830	frameshift deletion	exonic	Nlrp1a	frameshift deletion
chr13	107889591	107889591	exonic	ENSMUSG000000032846	frameshift insertion	exonic	Zswim6	frameshift insertion
chr13	107889583	107889583	exonic	ENSMUSG000000032846	frameshift insertion	exonic	Zswim6	frameshift insertion
chr7	15834842	15834842	exonic	ENSMUSG000000041583	frameshift deletion	exonic	Obox6	frameshift deletion
chr11	71122755	71122757	exonic	ENSMUSG000000069830	nonframeshift deletion	exonic	Nlrp1a	nonframeshift deletion
chr11	71123884	71123884	exonic	ENSMUSG000000069830	frameshift insertion	exonic	Nlrp1a	frameshift insertion
chr11	71123882	71123883	exonic	ENSMUSG000000069830	frameshift deletion	exonic	Nlrp1a	frameshift deletion
chr3	67594297	67594300	exonic	ENSMUSG000000027775	frameshift deletion	exonic	Mfsd1	frameshift deletion
chr13	107889598	107889600	exonic	ENSMUSG000000032846	nonframeshift deletion	exonic	Zswim6	nonframeshift deletion
chr17	23346071	23346071	exonic	ENSMUSG000000091076	frameshift deletion	exonic	Vmn2r115	frameshift deletion
chr17	23345092	23345092	exonic	ENSMUSG000000091076	frameshift deletion	exonic	Vmn2r115	frameshift deletion

## tumor #1349

Chr	Start	End	Func.ensGene	Gene.ensGene	ExonicFunc.ensGene	Func.refGene	Gene.refGene	ExonicFunc.refGene
chr7	122222147	122222147	exonic	ENSMUSG000000030865	frameshift deletion	exonic	Chp2	frameshift deletion
chr17	46412542	46412542	exonic	ENSMUSG000000015597	frameshift insertion	exonic	Zfp318	frameshift insertion
chr16	44437127	44437127	exonic	ENSMUSG000000071550	frameshift insertion	exonic	Cfap44	frameshift insertion
chr12	16707843	16707844	exonic	ENSMUSG000000036523	frameshift deletion	exonic	Greb1	frameshift deletion
chr11	71123751	71123751	exonic	ENSMUSG000000069830	frameshift insertion	exonic	Nlrp1a	frameshift insertion
chr5	14975415	14975417	exonic	ENSMUSG000000072188	nonframeshift deletion	exonic	Gm10354	nonframeshift deletion
chr16	32753314	32753450	exonic	ENSMUSG000000079620	nonframeshift deletion	exonic	Muc4	nonframeshift deletion
chr9	3025719	3025719	exonic	ENSMUSG000000095891	frameshift deletion	intergenic	NONE,Mir101c	.
chr11	71123745	71123746	exonic	ENSMUSG000000069830	frameshift deletion	exonic	Nlrp1a	frameshift deletion
chr7	141637055	141637056	exonic	ENSMUSG000000048191	frameshift deletion	intronic	Muc6	.
chr11	71218141	71218141	exonic	ENSMUSG000000070390	frameshift insertion	exonic	Nlrp1b	frameshift insertion
chr8	33621700	33621702	exonic	ENSMUSG000000052906	frameshift deletion	exonic	Ubxn8	frameshift deletion
chr11	71218139	71218140	exonic	ENSMUSG000000070390	frameshift deletion	exonic	Nlrp1b	frameshift deletion
chr10	89473756	89473756	exonic	ENSMUSG000000047638	frameshift deletion	exonic	Nr1h4	frameshift deletion
chr14	19418847	19418847	exonic	ENSMUSG000000095280	frameshift insertion	intergenic	Ube2e2,Gm5458	.

chr12	74299055	74299056	exonic	ENSMUSG00000029878	frameshift deletion	exonic	Dbpht2	frameshift deletion
chr16	44437124	44437127	exonic	ENSMUSG00000071550	frameshift deletion	exonic	Cfap44	frameshift deletion
chr7	102020492	102020492	exonic	ENSMUSG00000070426	stopgain	exonic	Rnf121	stopgain



Summary of identified tumor specific SNV

tumor #1319

Chromosome	Position	Reference	Alternative	Ensemble	Ensemble_SNV_type	Ensemble_isoforms	Gene_symbol	RefSeq_SNV_type RefSeq_isoforms
chr7	84947634	A	G	ENSMUSG00000066372	nonsynonymous SNV	ENSMUSG00000066372.E	Vmn2r65	nonsynonymous SNV
chr17	84633582	C	G	ENSMUSG00000024253	nonsynonymous SNV	ENSMUSG00000024253.E	Dync2H1	nonsynonymous SNV

tumor #1322

Chromosome	Position	Reference	Alternative	Ensemble	Ensemble_SNV_type	Ensemble_isoforms	Gene_symbol	RefSeq_SNV_type RefSeq_isoforms
chr7	44996615	C	A	ENSMUSG00000003190	nonsynonymous SNV	ENSMUSG00000003190.E	Irf2l2	nonsynonymous SNV
chr14	55708677	G	A	ENSMUSG00000022218	nonsynonymous SNV	ENSMUSG00000022218.E	Tgim1	nonsynonymous SNV
chr14	99088802	A	C	ENSMUSG000000033166	nonsynonymous SNV	ENSMUSG000000033166.E	Dix3	nonsynonymous SNV
chr14	19416869	A	G	ENSMUSG000000095280	nonsynonymous SNV	ENSMUSG000000095280.E	Ube2e2,Gm5458	.
chr1	127822017	A	G	ENSMUSG000000051590	nonsynonymous SNV	ENSMUSG000000051590.E	Map3k19	nonsynonymous SNV
chr11	71218445	C	T	ENSMUSG00000070390	nonsynonymous SNV	ENSMUSG00000070390.E	Nlrp1b	nonsynonymous SNV
chr11	71173016	G	A	ENSMUSG00000070390	nonsynonymous SNV	ENSMUSG00000070390.E	Nlrp1b	nonsynonymous SNV
chr17	33543237	C	T	ENSMUSG00000024299	nonsynonymous SNV	ENSMUSG00000024299.E	Adamts10	nonsynonymous SNV
chr12	105827058	C	A	ENSMUSG00000021111	nonsynonymous SNV	ENSMUSG00000021111.E	Papda	nonsynonymous SNV
chr15	8303440	G	T	ENSMUSG00000022141	nonsynonymous SNV	ENSMUSG00000022141.E	Nipbl	nonsynonymous SNV
chrX	139834536	T	A	ENSMUSG00000031434	nonsynonymous SNV	ENSMUSG00000031434.E	MorC4	nonsynonymous SNV
chr4	147613229	G	T	ENSMUSG00000066000	nonsynonymous SNV	ENSMUSG00000066000.E	Zfp79	nonsynonymous SNV
chr4	147613220	C	G	ENSMUSG00000066000	nonsynonymous SNV	ENSMUSG00000066000.E	Zfp79	nonsynonymous SNV
chrM	4258	A	G	ENSMUSG00000064345	unknown	UNKNOWN	NONE,NONE	.
chr2	29996529	A	T	ENSMUSG00000057738	nonsynonymous SNV	ENSMUSG00000057738.E	Splan1	nonsynonymous SNV
chr9	3830838	C	T	ENSMUSG00000096201	nonsynonymous SNV	ENSMUSG00000096201.E	Mir201c	.
chr10	76515684	G	A	ENSMUSG0000001150	nonsynonymous SNV	ENSMUSG0000001150.E	Mcm3ap	nonsynonymous SNV
chr10	27328155	A	C	ENSMUSG00000019899	nonsynonymous SNV	ENSMUSG00000019899.E	Lama2	nonsynonymous SNV
chr5	112337065	G	C	ENSMUSG00000029345	nonsynonymous SNV	ENSMUSG00000029345.E	Tfpi11	nonsynonymous SNV

tumor #1323

Chromosome	Position	Reference	Alternative	Ensemble	Ensemble_SNV_type	Ensemble_isoforms	Gene_symbol	RefSeq_SNV_type RefSeq_isoforms
chr7	113385983	T	C	ENSMUSG00000059077	nonsynonymous SNV	ENSMUSG00000059077.E	Pth	nonsynonymous SNV
chr11	72309055	T	C	ENSMUSG00000040483	nonsynonymous SNV	ENSMUSG00000040483.E	Xaf1	.
chr2	156701235	A	T	ENSMUSG00000061689	nonsynonymous SNV	ENSMUSG00000061689.E	Olgap4	nonsynonymous SNV

tumor #1349

Chromosome	Position	Reference	Alternative	Ensemble	Ensemble_SNV_type	Ensemble_isoforms	Gene_symbol	RefSeq_SNV_type RefSeq_isoforms
chr7	31134427	A	C	ENSMUSG00000001248	stopgain	ENSMUSG00000001248.E	Gramd1a	stopgain
chr7	140176521	C	T	ENSMUSG00000051051	nonsynonymous SNV	ENSMUSG00000051051.E	Olfir523	nonsynonymous SNV
chr7	3222537	T	C	ENSMUSG00000078817	nonsynonymous SNV	ENSMUSG00000078817.E	Nlrp12	nonsynonymous SNV
chr7	107181135	A	C	ENSMUSG00000016626	nonsynonymous SNV	ENSMUSG00000016626.E	Nlrp14	nonsynonymous SNV
chr14	65295486	C	G	ENSMUSG00000034532	nonsynonymous SNV	ENSMUSG00000034532.E	Fbw6	nonsynonymous SNV
chrY	829211	G	C	ENSMUSG00000069053	nonsynonymous SNV	ENSMUSG00000069053.E	Uba1y	nonsynonymous SNV
chr19	13838420	A	C	ENSMUSG00000057270	nonsynonymous SNV	ENSMUSG00000057270.E	Olfir1501	nonsynonymous SNV
chr19	38898875	A	G	ENSMUSG00000048720	nonsynonymous SNV	ENSMUSG00000048720.E	Tbc1d12	nonsynonymous SNV
chr19	43902707	C	A	ENSMUSG00000025195	nonsynonymous SNV	ENSMUSG00000025195.E	Dnm1bp	nonsynonymous SNV
chr19	5027383	C	G	ENSMUSG00000024891	nonsynonymous SNV	ENSMUSG00000024891.E	Sic29a2	nonsynonymous SNV
chr1	139553575	A	C	ENSMUSG00000057037	nonsynonymous SNV	ENSMUSG00000057037.E	Ctfr1	nonsynonymous SNV
chr1	85659834	A	G	ENSMUSG00000026222	nonsynonymous SNV	ENSMUSG00000026222.E	Sp100	nonsynonymous SNV
chr11	100794558	C	T	ENSMUSG00000020919	nonsynonymous SNV	ENSMUSG00000020919.E	Stat5b	nonsynonymous SNV
chr11	121500077	A	G	ENSMUSG00000039230	nonsynonymous SNV	ENSMUSG00000039230.E	Tbcd	nonsynonymous SNV
chr11	102294179	T	G	ENSMUSG00000059995	nonsynonymous SNV	ENSMUSG00000059995.E	Atxn7f3	nonsynonymous SNV
chr11	80637993	A	G	ENSMUSG00000035441	nonsynonymous SNV	ENSMUSG00000035441.E	Myo1d	nonsynonymous SNV
chr6	121024734	T	G	ENSMUSG00000003178	nonsynonymous SNV	ENSMUSG00000003178.E	Mical3	nonsynonymous SNV
chr6	39400456	T	A	ENSMUSG00000029922	nonsynonymous SNV	ENSMUSG00000029922.E	Mktn1	nonsynonymous SNV
chr6	85621932	A	G	ENSMUSG00000063810	nonsynonymous SNV	ENSMUSG00000063810.E	Alms1	nonsynonymous SNV
chr17	24366112	T	G	ENSMUSG00000024130	nonsynonymous SNV	ENSMUSG00000024130.E	Abca3	nonsynonymous SNV
chr16	94267391	T	G	ENSMUSG00000040820	nonsynonymous SNV	ENSMUSG00000040820.E	Hlcs	nonsynonymous SNV
chr18	34796790	C	T	ENSMUSG00000038773	nonsynonymous SNV	ENSMUSG00000038773.E	Kdm3b	nonsynonymous SNV
chr3	96854557	A	G	ENSMUSG00000038298	nonsynonymous SNV	ENSMUSG00000038298.E	Pdk1	nonsynonymous SNV
chr3	95734876	T	C	ENSMUSG00000028108	nonsynonymous SNV	ENSMUSG00000028108.E	Ecm1	nonsynonymous SNV
chrX	134693042	C	A	ENSMUSG00000049804	nonsynonymous SNV	ENSMUSG00000049804.E	Armcx6	nonsynonymous SNV
chr4	127123615	A	T	ENSMUSG00000042408	nonsynonymous SNV	ENSMUSG00000042408.E	Zmyx6	nonsynonymous SNV
chr4	53109264	A	G	ENSMUSG00000015243	nonsynonymous SNV	ENSMUSG00000015243.E	Abca1	nonsynonymous SNV
chr4	41379146	T	C	ENSMUSG00000028437	nonsynonymous SNV	ENSMUSG00000028437.E	Ubp1	nonsynonymous SNV
chr4	11698700	T	G	ENSMUSG00000028703	nonsynonymous SNV	ENSMUSG00000028703.E	Lrrc41	nonsynonymous SNV
chr2	112406224	A	C	ENSMUSG00000027132	nonsynonymous SNV	ENSMUSG00000027132.E	Katnbl1	nonsynonymous SNV
chr2	76887257	G	A	ENSMUSG00000051747	stopgain	ENSMUSG00000051747.E	Ttn	stopgain
chr9	38308314	A	T	ENSMUSG00000096201	nonsynonymous SNV	ENSMUSG00000096201.E	Mir101c	.
chr9	44685362	A	C	ENSMUSG00000032098	nonsynonymous SNV	ENSMUSG00000032098.E	Treh	nonsynonymous SNV
chr9	3838308	C	T	ENSMUSG00000096201	nonsynonymous SNV	ENSMUSG00000096201.E	Mir101c	.
chr13	119477808	C	A	ENSMUSG00000062822	nonsynonymous SNV	ENSMUSG00000062822.E	4833420G17lik	nonsynonymous SNV
chr13	73327416	C	G	ENSMUSG00000021606	nonsynonymous SNV	ENSMUSG00000021606.E	Nduf6	nonsynonymous SNV
chr10	102482377	T	G	ENSMUSG00000019890	nonsynonymous SNV	ENSMUSG00000019890.E	Nts	nonsynonymous SNV
chr10	80334080	G	A	ENSMUSG00000035504	nonsynonymous SNV	ENSMUSG00000035504.E	Reep6	nonsynonymous SNV

Supplementary Table 13

Gene	Tissue	Total number of samples	AA mutation	Mutation ID (COSMIC)	FATHMM prediction
RNASEH2A	Large intestine (1), Oesophagus (1), Stomach (1)	3	V133M	COSM170827	Pathogenic (score 0.98)
RNASEH2A	Skin (4)	4	P158S	COSM5854703	Pathogenic (score 0.98)
RNASEH2A	Skin (4)	4	R280G	COSM5715482	Neutral (score 0.10)
RNASEH2B	Large intestine (2)	2	T280A	COSM1677671	Pathogenic (score 0.84)
RNASEH2C	Large intestine (2)	2	R145C	COSM5360630	Pathogenic (score 0.70)

	<b>CRC (n=122)</b>	<b>Correlation with <i>RNASEH2A</i> expression in tumor</b>
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<b>Age</b>	70 ± 10,1	n.s.
<b>Male Sex; n (%)</b>	68 (56)	n.s.
<b>BMI week 0</b>	27 ± 4,6	n.s.
<b>T-Stadium n, (n%)</b>	1= 3 (2) 2= 30 (25) 3= 70 (57) 4= 19 (16)	n.s.
<b>N-Stadium n, (n%)</b>	0= 64 (52) 1= 26 (22) 2= 32 (26)	n.s.
<b>M-Stadium n, (n%)</b>	95 (77)	n.s.
<b>UICC n, (n%)</b>	I 23 (19) II 38 (31) III 33 (27) IV 28 (23)	n.s.
<b>UICC-Grading n, (n%)</b>	I 61 (50) II 61 (50)	n.s.
<b>R0/1 Resektion n, (n%)</b>	RO 112 (92) R1 8 (7) RX 2 (1)	n.s.
<b>Localization n, (n%)</b>	Co Asc 36 (29) Co Tr 6 (5) Co Des 5 (4) Sig 30 (25) Rec 44 (36)	n.s.

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